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and adjacent phenomena

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Editorial
The Increasing Specificity and Maturity
of Role-playing Game Studies

This issue of the *International Journal of Role-playing* signals several hallmarks. First, the issue is our 15th since the inception of the journal, with Issue 1 helmed by editor Anders Drachen (2008). Not only has our editorial team grown over the years, but our reviewer list is large, varied, and highly interdisciplinary. This issue also corresponds with the revisions and rebranding of the *The Routledge Handbook of Role-playing Game Studies* (Zagal and Deterding 2024), which has been updated with relevant research and expanded from its original publication only six years ago (Zagal and Deterding 2018) and will also be released in June 2024.[1]

Since that publication, the field has exploded to the point where not only are new publications difficult to track, but they contain information that was previously relegated to "wish lists" for scholars and practitioners. Examples include (to cite just a few):

- Completed manuals for tabletop role-playing games as therapeutic interventions published through academic channels, (e.g., Connell 2023; Kilmer 2023);
- Theoretical work on the transformative potential of RPGs informed by practice (Kemper 2020; Bowman and Hugaas 2021);
- Hard qualitative and quantitative data on the impacts of role-playing games on participants, e.g., in wellbeing and therapeutic applications (Katō 2019; Helbig 2019; Wright et al. 2020; Abbott, Stauss, and Burnett 2021; Causo and Quinlan 2021;. Ball 2022; Varrette et al. 2023);
- Review articles compiling themes and synthesizing the results from several such papers at a time (Mendoza 2020; Henrich and Worthington 2021; Arenas, Viduani, and Araujo 2022; Baker, Turner, and Kotera 2022);
- Detailed guidance for educators on the use of RPGs in classroom applications (Geneuss 2021; Cullinan and Genova 2023; Westborg 2023);
- The application of RPGs in a wide variety of educational contexts, including fashion design (Hixson and Eike 2024), computer science (Fey et al. 2022), and American Sign Language (Cullinan and Wood 2024);
- Clear connections formed between RPGs and other related phenomena, e.g., practices in counseling (Diakolambrianou and Bowman 2023) and psychodrama (Pitkänen 2019);
- A thorough examination of players exploring and expressing marginalized genders and sexualities through RPGs (Sihvonen and Stenros 2019; Stenros and Sihvonen 2019; Baird 2021), as well as the heritage of associated alternative communities (Groth, Grasmo, and Edland 2021; Baird 2023; Levin 2023);
- A critical approach to problematic representations and issues with inclusion regarding marginalized identities (Leonard, Janjetovic, and Usman 2021) such as gender (Stang 2021; Stang and Trammell 2020; Dashiell 2020), sexuality (Sihvonen and Stenros 2019), race/ethnicity (Eddy, Samantha 2020; Dashiell 2022; Trammell 2023), and disability (Jones 2018), among other important factors;
- The negative impacts on RPG communities, play styles, and game texts of capitalism (Torner 2018, Seregina 2024), cultural appropriation (Eddy, Samantha 2020; Eddy, Zoë Antoinette

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[1]   To herald the arrival of the book on June 27, we have updated the references in this issue to *The Routledge Handbook of Role-playing Game Studies* to reflect the recent revisions, but the core content remains the same as the 2018 version. Page numbers to follow.

2020), and colonialism (Eddy, Zoë Antoinette 2020; Trammell 2022);

- The development of safety discourses in RPG communities over time reflected in academic work (Koljonen 2020; Villarreal 2021; Bowman and Lieberoth 2024), etc.

These developments signal not only the maturation of the field, but its increased specificity in terms of evidence-based work and complex theoretical models. In a maturing field, the literature is extensive enough to build upon itself. Academics can make larger scale assessments about assertions they previously only hypothesized. New knowledge is theorized, articulated, tested, and shared. Developing scholars can easily find information on their chosen topic through indexing, search engines, and citations, leading to far fewer "vacuum studies." Areas that were previously siloed into distinct categories now cite and learn from one another, e.g., tabletop vs. larp; educational vs. therapeutic vs. leisure; traditional vs. indie. Students can now pursue an online Master's degree in Transformative Game Design at Uppsala University, the first in the world to our knowledge that focuses exclusively on analog RPGs, with hopefully many more programmes in our field to follow. Regardless of the many catastrophes, injustices, and alarming developments present in our world today, within this small bubble, we are honored to be involved in the increasing specificity and maturity of role-playing game studies.

The articles in this issue represent an impressive culmination of this work, reflecting many of the topics on the above-mentioned wishlists. As befits our call for papers, each of the articles emphasize the transformative potential of role-playing games in leisure, educational, and therapeutic settings in some way.

The issue begins with an ambitious theoretical exploration by Kjell Hedgard Hugaas entitled, "Bleed and Identity: A Conceptual Model of Bleed and How Bleed-out from Role-playing Games Can Affect a Player's Sense of Self." The article unpacks the complicated and sometimes nebulous topics of bleed and identity, connecting them not only to the role-playing game studies discourse, but also to relevant concepts in psychology, neuroscience, and social psychology. The article contributes three important innovations to bleed theory: the concept of the bleed perception threshold; the distinction between basic bleed components and higher bleed complexes; and a relational matrix of bleed components and complexes. Hugaas' work brings us closer to answering questions about why these games can be so transformational, as well as explaining some of the psychological mechanisms behind these meaningful changes within a player's sense of self. He highlights expression and validation of marginalized gender identities as an example.

Our next article deepens into these questions with an emphasis on incidental positive impacts of RPGs for players in leisure environments. Orla Walsh and Conor Linehan's "Roll for Insight: Understanding How the Experience of Playing *Dungeons & Dragons* Impacts the Mental Health of an Average Player" gathers 10 semi-structured interviews and applies a reflexive thematic analysis (Braun and Clarke 2006) to examine the self-reported connection between playing *D&D* and well-being. Walsh and Linehan highlight five key themes that illuminate the transformative potential of role-playing: escapism, exploration of self, creative expression, social support, and establishing a routine. Since these games were not applied in a therapeutic context, this research emphasizes the raw potency not only of the world's highest selling RPG, but the practice of role-playing games more generally.

Continuing this thread, Emry Sottile's "'It Might Have a Little to Do with Wish Fulfillment': The Life-Giving Force of Queer Performance in TTRPG Spaces" focuses specifically on the potential of *D&D* communities to facilitate queer gender exploration. To build his case, the author engages with past scholarship, autoethnographic writing, and various forms of cultural production surrounding TTRPGs, queer identity, avatars, and gender performance. Sottile's powerful personal accounts punctuate their examination of theory and description of RPG communities. He interrogates how such spaces might provide self-expression and acceptance for trans and nonbinary players in societies that are becoming increasingly "adversarial to their existence and visibility" in recent years, providing a first-hand account of some of the types of bleed explained in Hugaas' paper.

Our next article explores the topic of wellbeing through the lens of a series of larp interventions. Kerttu Lehto's "Nordic Larp as a Method in Mental Health Care and Substance Abuse Work: Case *SÄRÖT*" details the creation and implementation of three larps intended to have positive impacts on participants' well-being. Developed by the author, a community educator, in collaboration with a psychiatric nurse, the *SÄRÖT* trilogy tackles three major themes respectively: mental health, substance abuse, and the experiences of a bystander. Lehto discusses how respondents reported changes in the way they experience their current situation in life in data gathered from interviews, observation, and free feedback. Positive impacts players attributed to the larps include players processing traumas, gaining tools for dealing with problems, making active changes such as applying for a new job, getting help for mental health issues, and turning to social workers. Unlike the previous two articles emphasizing games like *D&D* produced for entertainment, *SÄRÖT* was designed within the Nordic larp tradition, which often features intense socially realistic themes on difficult topics with progressive aims. Lehto concludes with design recommendations for creators wanting to use larp as an intervention in the future.

Continuing this theme, Lennart Bartenstein's "Live Action Role-playing (Larp) in Cognitive Behavioral Psychotherapy: A Case Study" provides an in-depth exploration of the design, implementation, and longitudinal results of a therapeutic larp intervention. The study provides quantitative and qualitative data taken two months before the larp, two weeks after the larp, and three months later. The study results supported CBT-oriented larp as a suitable treatment for participants with specific mental challenges. While the participants had positive experiences and good goal attainment overall, in some cases, negative trends were observed. Importantly, several participants mentioned that longer lasting effects might have been more likely with repeated larp experiences rather than the one-shot nature of the intervention, although the author acknowledges the heavy preparations needed to run a therapeutic larp of this nature. Bartenstein also emphasizes the importance of ongoing psychotherapy alongside the adjunctive larp interventions to reinforce lasting positive change.

Shifting our attention from mental health to educational development through RPGs, Maryanne Cullinan gathers research from teachers in the field in her article, "Surveying the Perspectives of Middle and High School Educators Who Use Role-playing Games as Pedagogy." Cullinan is especially interested in educators in 5-12th grade classrooms. She gathers 11 interviews from teachers in the United States, Canada, and Cambodia and analyzes them through the lens of Gary Alan Fine's (1983) frame theory. The practitioners reported increased engagement, new social connections, the development of affinity groups, and a lowering of perceived social stakes for students in the setting. Teachers also reported a shift in classroom attitudes about success from individualism to a more collectivistic stance. Cullinan emphasizes the need for more research on how educators are using RPGs in the classroom, as well as more theory-informed pedagogy based on best practice in role-playing game studies.

Our next authors explore larp as a method of leadership development education for adults in various settings. In Mátyás Hartyándi and Gijs van Bilsen's "Playing with Leadership: A Multiple Case Study of Leadership Development Larps," the authors present an extensive discussion of larps that feature leadership as a theme, as well as games designed specifically with leadership development theories and goals in mind. Applying versions of Fine's (1983) aforementioned frame theory, as well as J. Tuomas Harviainen's (2011) definition of larp as compared to simulation and other forms of educational role-playing, they categorize the attributes of 4 case studies, including 2 larps designed by each author respectively. The case studies were run for a variety of populations, including job seekers at an assessment center, cadets at the Royal Norwegian Naval Academy, consultants in a Hungarian firm, students at a university, simulation experts at the ISAGA conference, and managers and directors at a retreat. Hartyándi and van Bilsen conclude with several design recommendations, also posing additional questions as to the distinction between larps and other forms of educational role-playing.

The authors of the final article in this issue also use educational theory to understand the potential of RPGs, this time through the lens of tabletop source material. In Jeremy Riel and Rob Monahan's "Learning from Ludemes: An Inventory of Common Player Actions within Tabletop Role-Playing

Games (TTRPGs) to Inform Principled Design of Game-Based Learning Experiences," the authors discuss the many benefits of experiential learning, applying established pedagogical theories to *Dungeons & Dragons 5th Ed.*, evaluating its potential for helping students achieving educational goals. Riel and Monahan focus explicitly on the developmental value of potential actions offered through the *Player's Handbook* (Wizards 2014), which the authors refer to as *ludemes* (Stephenson et al. 2021). After identifying 379 original ludeme codes through thematic analysis (Thomas 2006; Merriam 2009), the authors identified 37 axial codes, and distilled them into 7 supercategories: performing an in-game action; role-playing; receiving information and instructions; resolving actions and uncertainty; realizing a character; table talking; and serving as DM. The authors attach learning objectives to each of these actions, offering an impressive array of skills that the game implicitly invites and offering recommendations for ways in which educators can cultivate these skills further in educational interventions.

Altogether, these articles offer a tremendous display of the maturity and increased specificity present in our now-thriving field. We look forward to what the future will bring to role-playing game studies with the support of this excellent foundation in its growing number of publication channels.

-- Sarah Lynne Bowman, William J. White, and Evan Torner
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REFERENCES

Abbott, Matthew S., Kimberly A. Stauss, and Allen F. Burnett. 2021. "Table-top Role-playing Games as a Therapeutic Intervention with Adults to Increase Social Connectedness." *Social Work with Groups* 45, no. 1 (16-21).

Baird, Josephine. 2021. "Role-playing the Self: Trans Self-Expression, Exploration, and Embodiment in (Live Action) Role-playing Games." *International Journal of Role-Playing* 11: 94-113. https://doi.org/10.33063/ijrp.vi11.285

———. 2023. "Larp as a Potential Space for Non-Formal Queer Cultural Heritage." *International Journal of Role-playing* 14: 71-81.

Ball, Graham. 2022. "A Phenomenological Inquiry into the Therapeutic Aspects of Tabletop Roleplaying Games." Ph.D. diss, UWE Bristol, October 6.

Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." Qualitative *Research in Psychology* 3, no. 2: 77-101.

Bowman, Sarah Lynne, and Andreas Lieberoth. 2024. "Psychology and Role-playing Games." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Bowman, Sarah Lynne, and Kjell Hedgard Hugaas. 2021. "Magic is Real: How Role-playing Can Transform Our Identities, Our Communities, and Our Lives." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 52-74. Oslo, Norway: Knutepunkt.

Causo, Francesco, and Elly Quinlan. 2021. "Defeating Dragons and Demons: Consumers' Perspectives on Mental Health Recovery in Role-playing games." *Australian Psychologist* 56, no. 3: 256–267.

Connell, Megan. 2023. *Tabletop Role-Playing Therapy: A Guide for the Clinician Game Master.* W. W. Norton & Company.

Cullinan, Maryanne, and Jennifer Genova. 2023. "Gaming the Systems: A Component Analysis Framework for the Classroom Use of RPGs." *International Journal of Role-Playing* 13: 7-17.

Cullinan, Maryanne, and Laura L. Wood. 2024. "Getting Inspired: A Qualitative Study on the Use of the Inspirisles Role-playing Game to Teach Middle Schoolers American Sign Language." *Simulation & Gaming* (January 26). https://doi.org/10.1177/10468781241229614

Diakolambrianou, Elektra, and Sarah Lynne Bowman. 2023. "Dual Consciousness: What Psychology and Counseling Theories Can Teach and Learn Regarding Identity and the Role-Playing Game Experience." *Journal of Roleplaying Studies and STEAM* 2, no. 2: 5-37. https://digitalcommons.njit.edu/jrpssteam/vol2/iss2/4

Dashiell, Steven L. 2020. "Hooligans at the Table: The Concept of Male Preserves in Tabletop Role-playing Games." *International Journal of Role-Playing* 10: 26-39.

———. 2022. "Discussions of Fantasy Characters and Demonstrations of a Defensive Hybridity in Gamer Masculinity." *The Journal of Men's Studies* (March 31).

Drachen, Anders, ed. 2008. "Editorial." *International Journal of Role-playing* 1.

Eddy, Samantha. 2020. "More than a Game: Racecraft and the Adaptation of 'Race' in Live Action Role Play." *Humanities* 9, no. 4: 124.

Eddy, Zoë Antoinette. 2020. "Playing at the Margins: Colonizing Fictions in New England Larp." *Humanities* 9, no. 4: 143.

Fey, James, Ella Dagan, Elena Márquez Segura, and Katherine Isbister. 2022. "Anywear Academy: A Larp-based Camp to Inspire Computational Interest in Middle School Girls." In *Designing Interactive Systems Conference (DIS '22), June 13–17, 2022, Virtual Event, Australia.* ACM, New York, NY, USA.

Fine, Gary Alan. 1983. *Shared Fantasy: Role-Playing Games as Social Worlds.* Chicago, IL: University of Chicago Press.

Geneuss, Katrin. 2021. "The Use of the Role-playing Technique STARS in Formal Didactic Contexts." *International Journal of Role-Playing* 11: 114-131.

Groth, Anna Emilie, Hanne "Hank" Grasmo, and Tor Kjetil Edland. 2021. *Just a Little Lovin': The Larp Script.* Drøbak.

Harviainen, J. Tuomas. 2011. "The Larping that is Not Larp." In Think Larp: Academic Writings from KP2011, edited by Thomas Duus Henriksen. Christian Bierlich, Kasper Friis Hansen, and Valdemar Kølle, 172–193. Rollespilsakademiet, Copenhagen.

Helbig, Kate A. 2019. "Evaluation of a Role-Playing Game to Improve Social Skills for Individuals with ASD." Ph.D. Diss., University of Southern Mississippi, USA.

Hixson, Sarah West, and Rachel J. Eike. 2024. "Mixed-Methods Assessment of an Apparel Edu-Larp Rooted in Self-Determination Theory." *International Journal of Fashion Design, Technology and Education*: 1–13. doi:10.1080/17543266.2024.233924

Jones, Shelly. 2018. "Blinded by the Roll: The Critical Fail of Disability in D&D." *Analog Game Studies* V, no. I (March 5).

Katō, Kōhei. 2019. "Employing Tabletop Role-Playing Games (TRPGs) in Social Communication Support Measures for Children and Youth with Autism Spectrum Disorder (ASD) in Japan: A Hands-On Report on the Use of Leisure Activities." *Japanese Journal of Analog Role-Playing Game Studies* 0: 23-28.

Kemper, Jonaya. 2020. "Wyrding the Self." In *What Do We Do When We Play?,* edited by Eleanor Saitta, Johanna Koljonen, Jukka Särkijärvi, Anne Serup Grove, Pauliina Männistö, and Mia Makkonen, 211-225. Helsinki, Finland: Solmukohta.

Kilmer, Elizabeth D., Adam D. Davis, Jared N. Kilmer, and Adam R. Johns. 2023. *Therapeutically Applied Role-Playing Games: The Game to Grow Method.* Routledge.

Koljonen, Johanna. 2020. "Larp Safety Design Fundamentals." *JARPS: Japanese Journal of Analog Role-Playing Game Studies 1: Emotional and Psychological Safety in TRPGs and Larp* (September 21): 3e-19e.

Levin, Hilda. 2023. "Bridging Historical and Present-Day Queer Community Through Embodied Role-playing." *International Journal of Role-playing* 14: 82-90.

Mendoza, Jonathan. 2020. "Gaming Intentionally: A Literature Review of the Viability of Role-playing Games as Drama-therapy-informed Interventions." Master's Thesis, Lesley University.

Merriam, Sharan B. 2009. *Qualitative Research: A Guide to Design and Implementation.* New York: Wiley & Sons.

Pitkänen, Jori (Linnamäki). 2019. "Formas o Métodos Para el Cambio. ¿Cómo contribuyen al cambio el Psicodrama, el Sociodrama, el Teatro Playback y el Role Playing educativo de acción en vivo o EDULARP." *La Hoja de Psicodrama* 28, no. 71 (May).

Seregina, Usva. 2024. "Readdressing Larp as Commodity: How Do We Define Value When the Customer Is Always Right?" In *Liminal Encounters: Evolving Discourse in Nordic and Nordic Inspired Larp*, edited by Kaisa Kangas, Jonne Arjoranta, and Ruska Kevätkoski. Helsinki, Finland: Ropecon ry.

Sihvonen, Tanja, and Jaakko Stenros. 2019. "On the Importance of Queer Romances - Role-play as Exploration and Performance of Sexuality." *WiderScreen* no. 1–2: 1–26.

Stang, Sarah. 2021. "The Fiend Folio's Female Fiends: Kelpies, Vampires, and Demon Queens." *Analog Game Studies, Special Issue: The Fiend Folio* (October 10).

Stang, Sarah, and Aaron Trammell. 2020. "The Ludic Bestiary: Misogynistic Tropes of Female Monstrosity in Dungeons & Dragons." *Games and Culture* 15, no. 6: 730-747.

Stenros, Jaakko, and Tanja Sihvonen. 2019. "Queer While Larping: Community, Identity, and Affective Labor in Nordic Live Action Role-Playing." *Analog Game Studies*: 2019 Role-Playing Game Summit (December 23).

Stephenson, Matthew, Dennis J. N. J. Soemers., Eric Piette, & Cameron Browne. 2021. "General Game Heuristic Prediction Based on Ludeme Descriptions." In *Proceedings of the 2021 IEEE Conference on Games (CoG)*. New York: IEEE.

Thomas, David R. 2006. "A General Inductive Approach for Analyzing Qualitative Evaluation Data." *American Journal of Evaluation* 27, no. 2: 237-246.

Torner, Evan. 2018. "Just (the Institution of Computer) Game Studies." *Analog Game Studies* 5, no. 2 (June 3).

Trammell, Aaron. 2022. "Decolonizing Play." *Critical Studies in Media Communication* (June 8).

———. 2023. *Repairing Play: A Black Phenomenology.* MIT Press.

Varrette, Matthew, Jack Berkenstock, Adams Greenwood-Ericksen, Anthony Ortega, Faith Michaels, Veronica Pietrobon, and Marc Schodorf. 2023. "Exploring the Efficacy of Cognitive Behavioral Therapy and Role-playing Games as an Intervention for Adults with Social Anxiety." *Social Work with Groups* 46, no. 2: 140-165.

Villarreal, Amanda Rose Hartley. 2021. "Unscripted Intimacies: Negotiating Consent in Gamified Performance." PhD diss, University of Colorado at Boulder. ProQuest Dissertations & Theses. 28649766.

Westborg, Josefin. 2023. "The Educational Role-Playing Game Design Matrix: Mapping Design Components onto Types of Education." *International Journal of Role-playing* 13: 18-30.

Wizards of the Coast. 2014. *D&D Player's Handbook*, 5th Edition. Renton, WA: Wizards of the Coast.

Wright, Jennifer Cole, Daniel E. Weissglass, and Vanessa Casey. 2020. "Imaginative Role-Playing as a Medium for Moral Development: Dungeons & Dragons Provides Moral Training." *Journal of Humanistic Psychology* 60, no. 1: 99-129.

Zagal, José P., and Sebastian Deterding, eds. 2018. *Role-Playing Game Studies: Transmedia Foundations*. New York: Routledge.

———, eds. 2024. *The Routledge Handbook of Role-playing Game Studies*. London: Routledge.

Bleed and Identity: A Conceptual Model of Bleed and How Bleed-out from Role-playing Games Can Affect a Player's Sense of Self

Abstract: The RPG concept bleed describes the spillover of physical states, mental states, physicality, values, opinions, and other similar concepts from player to character and vice versa. Over the years, numerous theorists have suggested several specific types of bleed, but how these suggested types stand in relation to each other has yet to be theorized. In order to create a foundation from which to better be able to study and conduct research on bleed, this article presents a conceptual model that places the previously suggested bleed types in relation to each other and to theories of identity creation in adjacent fields. The concept of the bleed perception threshold and the bleed complex of identity bleed is suggested as part of this model. The article then shows how theories concerned with identity creation from different fields such as psychology, social psychology, and neuroscience inform the model and how the model does not stand in opposition to them. Using the model and the presented theories as a starting point, the article makes suggestions about how bleed can affect a player's sense of self.

Keywords: sense of self, identity, role-playing, RPGs, larp, bleed, transformative play

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1. INTRODUCTION

This paper has two aims.[1] Firstly, it attempts to create more structure around how we use and refer to the role-playing term *bleed* (Boss 2007) in general, offering a starting point for further work by laying out the foundation for a conceptual model of bleed. This model is constructed on the principle of combining previous work and contributions to the field as far as possible, meaning that this paper will not conduct a revision on or evaluate if a previously suggested bleed type is valid or not. Secondly, this paper attempts to map some of the ways in which bleed-out from role-playing experiences can affect a player's sense of self. This mapping is done by using the concept of *identity bleed* as an example.

Throughout the paper, I reference and explain established theories of identity creation in other fields, such as psychology, social psychology, and neuroscience. This practice shows that the proposed conceptual model does not stand in opposition to these adjacent fields, but rather is informed by them. Potentially, the concepts suggested could also be of use and inform practices in these fields in return. In other words, this paper is not an attempt to thoroughly connect the adjacent fields to a finished theoretical model, but rather to establish the model as a foundation from which one can conduct further (interdisciplinary) research.

1.1 Identities

Our understanding of the self as a cognitive and social construct has solidified over the last century or so, with both social psychology and psychology offering up different theoretical approaches. Central to many modern theories of identity is the concept of a multiplicity of aspects of identity combining into an individual's *sense of self* (James 1890). Broadly, one

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1   This paper is a revised version of the author's 2022 Master's thesis completed at the Department of Game Design at Uppsala University.

can say that a person's sense of self is deeply connected to the enactment of these different aspects of identity within social settings and frames (Freud 1922; Erikson 1950; Goffman 1959, 1986; Jung 1976; Burke and Stets 2009; Stets and Serpe 2013; Jhangiani, Tarry, and Stangor 2022). This is not to be confused with the concept of multiplicity from personality psychology, which concerns itself with multiple, fully formed, and relatively independent identities within the same person (Ribáry et. al. 2017). Rather, it refers to distinct sides of a person's identity being dominant at different times, along the lines of Erving Goffman's (1959) theory on the presentation of self in differing social situations.

The idea of multiplicity of aspects of identity (James 1890) has in itself historically been controversial, as societies often seek to impose a singular and majority identity on individuals as a means of control. While this societal control over identity expression is easy to recognize in a historical context, it also continues to this day. For example, individual expressions of gender and sexual identity are still controlled, even by societies that we tend to view as progressive. The idea of a person having to conform to their assigned sex at birth is an example of a contemporary expression of this wish to impose singular and majority identity on individuals.

Thinking about our sense of self as created from multiple different aspects might make it easier to understand how our sense of self can shift in some aspects, while remaining unchanged in others. With regards to how participation in role-playing games might lead to changes in our sense of self, this understanding of identity is useful, as we can understand explorative play through our characters as connected directly to exploration of any given specific aspect of our own identity (Diakolambrianou and Bowman 2023). This understanding might also make processes of change appear less threatening, as even though we might change significantly in one aspect of our self, the overall feeling is that we are still the "same person" as we were before.

1.2 Role-Playing Games

Role-playing games, which to an extent often are purposefully designed to experiment with numerous aspects of identity, have also found themselves at the center of controversy. A well-known example is when the disappearance and later suicide of an American student in 1979-80 sparked a long campaign from fundamentalist right-wing groups aimed at tabletop role-playing (Stark 2012; Laycock 2015). The campaign, known colloquially as the Satanic Panic is partly still ongoing to this day, with campaigners using the media to argue for connections between role-playing and taboo activities like witchcraft, demon worship, and several types of violent and antisocial behavior (Stark 2012; Laycock 2015). A similar example of a moral panic leading to mainstream media attention is the campaign that culminated in the Swedish book *De övergivnas armé* (1997). The authors warn against the ways in which role-playing games can negatively influence and alter the behavior of adolescents and young adults, claiming that they were strategically used to brainwash players for numerous nefarious reasons (Müller 2011).

Even though over the years the different claims in these campaigns have been quickly disproven or discarded, the potential negative media attention might explain the often knee-jerk reactionary resistance one can experience when suggesting that role-playing games have the potential to influence our identities. Even as late as 2019, on publishing on the transformative potential of live action role-playing games in "The Butterfly Effect Manifesto" (Hugaas and Bowman 2019), we received feedback that some participants and designers felt uncomfortable

entertaining the thought of their games having the potential to affect players in significant ways. Some people felt uncomfortable with even the smallest suggestion of deviance that outside observers with a specific agenda could latch onto and use out of context.

1.2.1 Alibi

Role-playing involves acting as a character that is not yourself. *Alibi* is the role-playing term for the social contract that is (unconsciously) created between the players in which they agree that they will not hold each other accountable as players for the actions of the characters (Montola 2010). Sebastian Deterding defines alibi "as a motivational account… that deflects negative inference from displayed behavior to a person's identity" (2018, 268). Alibi is recognizable when players say things along the lines of: "I only did what my character would have done" or "That was not me; it was my character." While alibi makes play possible, in rare situations, certain players can exploit it to act in ways that are not acceptable within the game or outside of it; importantly, alibi should not provide players with a carte blanche to behave in any possible way that they wish.

More generally, alibi is essential for players to be able to fully engage with their character concepts and perform as their characters, especially if these alteregos differ from their own self-concept in significant ways. With regards to sense of self, the freedom of expression afforded by alibi can loosen the rigidity of an individual's need for self-continuity or lower their *identity defense* (Illeris 2004). Identity defense is a self-concept specific *defense mechanism* (Freud 1936), an unconscious protection from stress caused from internal or external factors (Brittanica 2023). Explore or question aspects of our identity might lead to temporary psychological imbalance and identity defenses can get activated as a result. If we wish to maximize the potential for personal growth, we need to find ways to lower our identity defense. Alibi might offer one of the reasons why role-playing games seem to provide high potential for such growth (Bowman and Hugaas 2021).

1.2.2 Self-presentation Theory

Finding inspiration in theater and acting theory, Erving Goffman suggested that we also perform different roles or parts of ourselves in our "real lives" depending on the social situation we currently inhabit (Goffman 1959). In what was later to be known as *self-presentation theory*, Goffman explained that individuals try to influence or even control the image that others have of them by changing their manner, appearance, or similar. Central to Goffman's approach is the suggestion that the "selves" we adopt often will be premade or generally recognizable as a certain specific role. For example, if I go to a funeral, I am expected to perform in a certain way depending on my relation to the deceased, wear a certain type of clothing, etc. In other words, just like in theater, we have an audience evaluating our performance, and to stray from the expected performance of the role has potential costs. One might incur a social cost and possible repercussions by showing up to a funeral wearing a bright red suit and laugh loudly during the eulogy. The wearing of the suit, the suit in itself, or even the laughing is not the problem, but rather the way the behavior deviates from the role performance that the audience is expecting in that specific setting.

1.3 Transformative Play

The understanding that role-playing games do have the potential to change our sense of self seems to be gaining ground in contemporary research (Bowman 2010; Beltrán 2013; Back, Segura and Waern 2017; Boccamazzo et. al 2018; Leonard and Thurman 2018; Kemper 2020; Lasley 2020; Baird 2021; Sidhu and Carter 2021; Loh 2021; Heinrich and Worthington 2021; Bowman and Hugaas 2021; Hugaas 2022). Exactly how this potential change of self occurs has not been thoroughly answered.

In 2019, Sarah Lynne Bowman and I proposed a categorization of the various ways in which that role-playing can have a transformative impact on player based upon our research and personal experience. The main categories and selected subcategories that are considered relevant for an individual's sense of self are presented here (Bowman and Hugaas 2019):

1. Emotional Processing
- Exploring aspects of self/selves
- Exploring aspects of personal experience
- Transforming the ego
- Identifying/practicing personality traits
- Reframing past experiences
- Being seen/witnessed

2. Social Cohesion
- Increasing empathy
- Prosocial communication
- Exploring intimacy/relationship dynamics
- Exploring community dynamics

3. Educational Goals
- Intrinsic motivation
- Content exposure/mastery
- Self-efficacy/perceived competence

4. Political Aims
- Paradigm shifting
- Critical ethical reasoning
- Expansion of worldview

Responsible designers who wish to design for transformative impacts need to be aware of not only the transformative potential in games, but also how to purposefully maximize the potential for such effects while at the same time maintaining a safe game environment. Understanding the ways in which bleed influences the players both pre-, during, and post-game can help game designers in their process.

1.3.1 Transformative Play through Bleed

Several theorists point to the role-playing phenomenon of *bleed* as one of the central ways in which players are affected by the experiences of their characters (Montola 2010; Beltrán 2013;

Bowman 2013, 2015, 2022; Kemper 2017, 2020; Leonard and Thurman 2018; Hugaas 2019a; Baird, Bowman, and Hugaas 2022). In short, bleed occurs when feelings, thoughts, emotions, physical states, cognitive constructs, aspects of personality, and similar "bleed over" from player to character or vice versa. When this spillover goes from player to character, we call it *bleed-in*, and when it goes from character to player, we call it *bleed-out*. With regards to this paper, I will mostly focus on the ways in which the latter can influence the player's sense of self and their identities.

The term bleed and its numerous iterations, while still remaining somewhat nebulous itself, still seems to provide theorists with helpful scaffolding when trying to explain related phenomena. Yet, at the moment, both the everyday and the academic use of the term suffer from a lack of a shared general understanding and agreement, both on what bleed is and is not. In particular, the colloquial understanding and use of the term has generally not deepened into the nuances added by the theory that has been developed over the years, leading to it mostly being used interchangeably to refer to the sub-category of *emotional bleed*. This lack of specificity may lead to scholars perceiving it as less useful and, as a result, sometimes even avoided in academic discourse. A term is only as valuable as it is useful; thus bleed may lose its colloquial and academic usefulness as long as it remains nebulous.

2. METHODOLOGY

This paper will include an interpretative reading of selected existing theory within the fields of role-playing, psychology, social psychology, neuroscience, and dramatic acting in areas where they potentially overlap and relate to the phenomenon of bleed. I will then construct a conceptual model of bleed informed by existing theories in adjacent fields, including a new complex named *identity bleed*, and a concept related to the subjective experience called the *bleed perception threshold*. Throughout the paper, I will discuss connections, findings, and potential areas of further study.

For a theory from an adjacent field to be mentioned in this paper, it needs to center either the creation, iteration, or performance of identity. The theory also needs to be generally accepted and applied in its own field. Where theories mostly overlap, only one of these will be chosen. For theories that offer only slight variations of existing or earlier work, the older and more general theory will be chosen, particularly in instances where the nuances/variations do not affect the connection to the suggested conceptual model to any significant degree, or at all. *Social identity theory* (Tajfel and Turner 1979) is not addressed, as it to a degree overlaps with *identity theory* (Stets and Burke 2000). Freud's *psychoanalytic theory of personality* is also not addressed, in part because of its focus on general behavior rather than identity performance; however, one can easily imagine that future work in the intersection between the proposed conceptual model and a psychoanalytic theory model could be of value to the field.

With regards to psychology this paper will touch on Erikson's *theory on psychosocial stages of development* (Erikson 1950) and Marcia's *theory of identity achievement* (Marcia 1966), as well as later offshoots and iterations of these two. It will also discuss Jung's theory of self and the process of *individuation* (Jung 1976), as well as the ideas of self-concept and self-schemas following Piaget's *theory of cognitive development* (Piaget 1972). In social psychology, the paper will focus on Stryker's *identity theory* (Stryker 1968), contemporary iterations on said work, and *self-presentation theory* (Goffman 1959). It will also make a short excursion into neuroscience, particularly in relation to memory construction, processing, and recollection, which I think are crucial to understanding certain types of bleed (Klein and Nichols 2012; Brown et al. 2019; Broom et al. 2021).

3. A CONCEPTUAL MODEL FOR UNDERSTANDING BLEED

In order for a conceptual model of bleed to be useful, we understand that it must describe a way to address how the phenomenon is subjectively experienced. The model must also describe how the different theorized types of bleed relate to each other, if at all. Furthermore, it should not set itself apart from adjacent fields, but rather interact and connect to them to produce further insight and meaning. Finally, the model should be robust and flexible enough to account for future additions, revisions, and alterations.

With these basics in mind, I suggest the following additions to the theory:
1. The concept of the *bleed perception threshold;*
2. A distinction between basic bleed components and higher bleed complexes; and
3. A relational matrix of bleed components and complexes.

3.1 Existing Bleed Concepts

The term for the phenomenon known as bleed traces its roots to early analog role-playing game communities. Bleed was first used in the discourse by Emily Care Boss (2007) at the Finnish convention Ropecon in 2007. For some time, bleed was generally understood as describing the phenomenon of emotions bleeding over from character to player and vice versa (Montola 2010), but later work has added a range of potential effects related to physical states, identity patterns, and other cognitive constructs. Central additions include (from Baird, Bowman, and Hugaas 2022):

*   *Emotional bleed* (Montola 2010; Bowman 2015), in which emotional states and feelings bleed between player and character;
*   *Ego bleed* (Beltrán 2012), in which fragments of personality and archetypal qualities bleed between player and character;
*   *Procedural bleed* (Hugaas 2019a), in which physical abilities, perceptual experience, motor skills, traits, habits, and other bodily states bleed between player and character;
*   *Memetic bleed* (Hugaas 2019a), in which ideas, thoughts, opinions, convictions, ideologies and similar cognitive constructs bleed between player and character;
*   *Relationship bleed*, in which aspects of social relationships bleed between player and character. Romantic bleed (Waern 2010; Harder 2018; Bowman and Hugaas 2021) is the most frequently discussed subtype;
*   *Emancipatory bleed* (Kemper 2017, 2020), in which players from marginalized backgrounds experience liberation from that marginalization through their characters; and
*   *Design bleed* (Toft and Harrer 2020), wherein the term is used as a lens to look at game design.

This list demonstrates that bleed is thought to be able to affect a multitude of aspects of the player's sense of self, ranging from personality and identity (Beltrán 2012), to opinions and even values (Hugaas 2019a). When a bleed experience contradicts and even challenges an established aspect of a player's sense of self, this can manifest in a heightened sense of confusion and discomfort some players have reported following strong bleed experiences (Montola 2010). This state of confusion and discomfort shares similarities with experiences related to identity confusion as described in several theories later in this paper.

Despite the value of the above-mentioned bleed concepts in themselves, a weakness is that they are mostly disconnected from each other, leading to little structure existing in which to place them in relation to each other. While much is left to discover and define with regards to bleed as a phenomenon, a basic conceptual model would be useful as a reference point for further discourse.

3.2 Bleed Perception Threshold

One of the defining attributes of bleed is that it is a subjectively experienced and self-reported phenomenon. This subjective nature leads to difficulties in data collection, as players' relative experiences and reporting of the phenomena spread out across a wide spectrum. Players even self-identify across this spectrum, which stretches from experiencing significant amounts of bleed at any given role-playing event to never experiencing bleed at all (Hansen and Hugaas 2017; Pedersen 2017). Seeing as how the mechanics of bleed are closely connected to processes of human identity creation that are running continuously, it is unlikely that any given individual player could be exempt from the effects of bleed. The claims that players have never had bleed could possibly rather be explained as these experiences not reaching an intensity that made bleed noticeable to them.

To address this challenge and facilitate a discourse around it, I suggest the concept of the *bleed perception threshold*. A functional definition of this concept is: the threshold at which bleed experiences are felt intensely enough to be noticeable to the player. Similar concepts around the subjective experience of phenomena include the *threshold of hearing* (Durrant and Lovrinic 1984) or the *pain threshold* (e.g., Hardy et. al. 1940). If we consider how sounds can be inaudible to a specific person, we can also consider how an instance of bleed might be similarly undetectable. If we fail to hear a sound, the cause might be another sound covering it, a physiological reason (e.g., age), or the sound remaining beyond the human capacity to hear it. Importantly, even though we did not hear the sound, the sound was still there, below our threshold of hearing. Similarly, numerous reasons may cause an instance of bleed to go unnoticed, but that does not mean it did not happen, only that it stayed below our bleed perception threshold. Bleed experiences with less intensity than needed to pass the threshold will not be noticeable to the player.

Figure 1 provides an example of what the intensity of a bleed experience and a player's bleed perception threshold could look like over time. As the example shows, the bleed experience could remain either below or above the player's perception threshold at different points in time. When below, bleed is not noticeable (and subsequently not reported) and when above, bleed is cognitively noticed, and thus reported as experienced by the player. In this hypothetical example, the player noticed the bleed for most of the event itself, then reported not experiencing bleed for a short period afterward, before once again reporting experiencing bleed for some time after the event.

As shown in Figure 1, the perception threshold is not a set fixed value. Every player's threshold will be unique to them and will also change over time and from situation to situation. In addition, a number of both internal and external factors could influence it, pushing it higher or lower on the scale. One can theorize that players who report not experiencing bleed either have a consistently high bleed perception threshold, participate in role-playing events that do not aim for high level intense bleed, or a combination of the two. For players who report having numerous strong bleed experiences, the opposite would then apply. An interesting side note here relates to how players can create *self-schemas* (Piaget 1972) that revolve around how often they experience bleed, if they even experience it at all. Self-schemas contain knowledge and

beliefs about the self. The need to verify these self-schemas or commit to them as part of the player's sense of self might affect their bleed perception threshold. I will further discuss the relationship between bleed and self-schemas later in this paper.

Figure 1: An example of the conceptual understanding of the bleed perception threshold (Hugaas 2022).
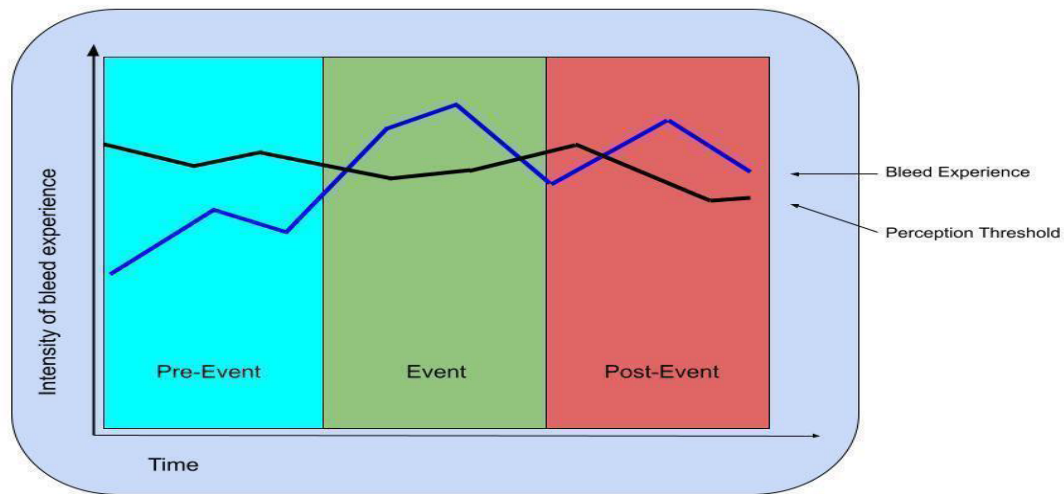
3.3.1 Spillover Between Player and Character

In order to create a relational matrix, I will first decide whether the so far theorized types of bleed should be considered part of it by considering them against a fundamental working phenomenological definition of bleed, which would roughly be along the lines of: some aspect that spills over from player to character or vice versa. Holding the above list of bleed concepts against this definition, with one exception, they all fit into it. However, the concept of *design bleed*, while being a very valuable addition to the field of game studies, focuses on the design process rather than the relationship between player and character, and can be removed from the model.

3.3.2 Bleed Components and Complexes

The second step is to define whether the bleed types describe a basic bleed component or a higher bleed complex. A a basic bleed component is a type of bleed that forms a building block for more complex bleed experiences, while a higher bleed complex combines several basic components and/or goes beyond the phenomenon itself, e.g., adding potential uses, tools, and effects beyond the primary experience. As with most phenomena related to human behavior and experience, the different types of bleed are not 100% either basic or complex. However, in order to make a conceptual model that has useful application for the discourse, making this distinction is necessary.

A sorting leaves us with the following list:

Basic Bleed Components:
- Emotional Bleed
- Memetic Bleed
- Procedural Bleed

Higher Bleed Complexes:
- Emancipatory Bleed
- Relationship Bleed
- Ego Bleed
- Identity Bleed

More about the particular attributes of each bleed type can be found in sections below.

Ego bleed is understood as the spillover of personality contents and archetypal qualities (Beltrán 2012). These archetypal qualities and personality traits contribute to a person's identity or sense of self. However, since these qualities and traits refer primarily to the internal psychological states relevant to depth psychology rather than sociologically informed definitions of identity, I therefore suggest a complex called *identity bleed* that includes ego bleed but expands beyond it. I will discuss in greater length below, but in short, all instances of ego bleed contribute to the complex of identity bleed, while only some specific parts of identity bleed are attributable to ego bleed.

3.3.3 A Relational Matrix of Bleed Components and Complexes

Before we attempt to structure the different bleed concepts into a relational matrix, I should note that the work and sources on each term are limited, as the field of role-playing game studies is only recently emerging. Thus, significant possible limitations in the relational matrix may exist, conducting a thorough study of theory regarding where the different concepts meet and potentially overlap is challenging. Still, the matrix can provide a rudimentary suggestion for thinking about bleed in a more structured manner for future theoretical work.

Structuring the different parts into the relational matrix, we can see that the higher complexes can contain several or all of the basic components. For example, an instance subjectively experienced as relationship bleed can contain elements of emotional bleed, memetic bleed, and procedural bleed. In other words, the basic bleed components combine to create higher bleed experiences that are categorizable as one (or several) of the bleed complexes.

Figure 2: A Relational Matrix of Bleed Components and Complexes (Hugaas 2022).
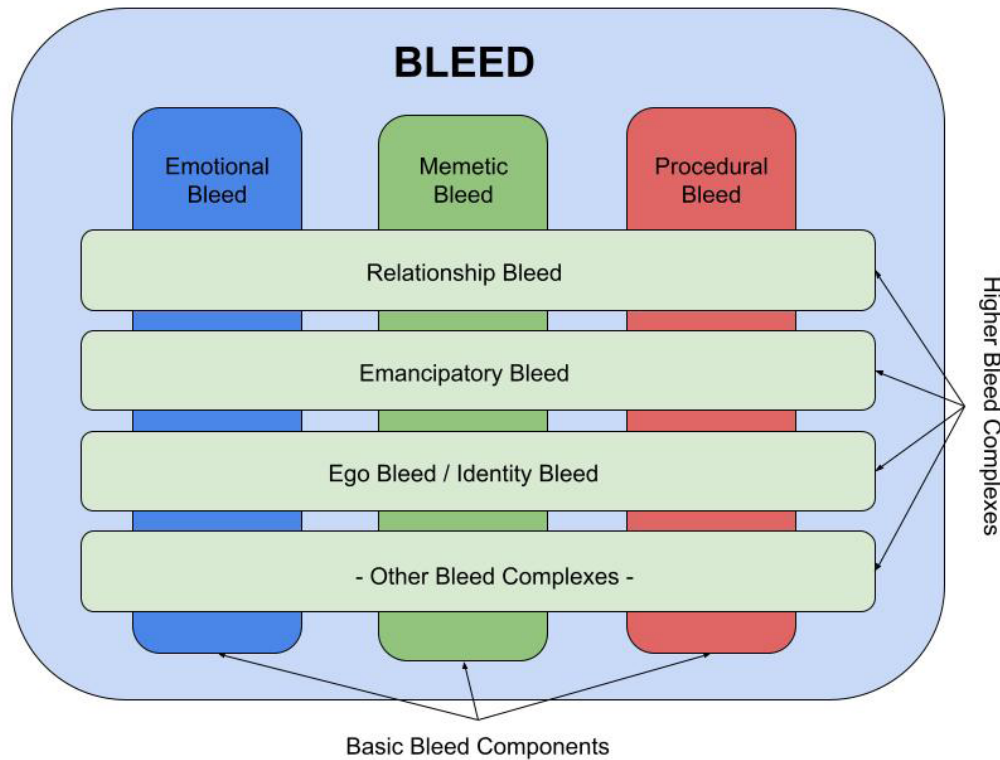
3.4 Bleed Components

As we can read from Figure 2, the model contains 3 basic bleed components. These components are based on our current understanding of the phenomenon, but the model makes room for additions or adjustments if needed. In theory, no finite number of potential components exists that can be added to the model, but in practice one can imagine that they are limited.

3.4.1 Emotional Bleed

Emotional bleed occurs when feelings or emotions of the character or player spillover to the other. It is probably the best-known type of bleed and theorists have written extensively about it over the years (see e.g., Boss 2007; Montola 2010; Waern 2010; Bowman 2013, 2015; Harder 2018; Leonard and Thurman 2018). Because of emotional bleed's position in the literature, and because it is probably the bleed component with the generally lowest perception threshold, it enjoys a somewhat universal acceptance in many role-playing scenes and traditions. As a result, when players use the word bleed, they often tend to refer to emotional bleed specifically.

3.4.2 Memetic Bleed

The word *meme* has taken on a different colloquial meaning the last few years than its original connotation, but it was originally conceptualized as a noun that "conveys the idea of a unit of cultural transmission, or a unit of imitation" (Dawkins 1976). In short, a meme is the cultural equivalent of the gene; memes are to culture what genes are to biology. As I have previously defined (2019a):

> Memetic bleed describes the process by which a meme — a unit of culture — carries an idea, behaviour, thought, belief, ethical conviction, or similar cognitive construct between player and character and vice versa. In addition, it describes the process by which memeplexes — complex structures of memes — are transmitted in part or in whole between players and characters that are part of a group, scene, or subculture and vice versa (Hugaas 2019a).

With regards to memeplexes, this quote might already be outdated. While the possibility exists that a bleed complex could consist of only memetic bleed, I find it unlikely. As the model matures and is subjected to further testing, this definition may need to change accordingly.

Notably, the suggestion that players' opinions, values and similar might be affected unconsciously as they play has attracted some controversy, as one could interpret this suggestion as giving credibility to the above-mentioned claims brought forward in the moral panic campaigns against role-playing games (Hugaas 2019b; Bowman and Hugaas 2021).

3.4.3 Procedural Bleed

Procedural bleed is connected to the physical embodiment of character. It describes how physical states, movements, bearings, perceptual experience, motor skills and similar spillover between player and character (Hugaas 2019a). Procedural bleed is particularly connected to *procedural memory*, which concerns itself with the acquisition and retention of motor, cognitive and perceptual skills (Klein and Nichols 2012). This form of bleed likely overlaps with the concept of embodied cognition: the idea that cognition is not restricted to the brain and central neurological system, but rather resides in the entire physical body and is activated in role-playing experiences (Lankoski and Järvelä 2012).

The term is particularly interesting when we consider the differences between procedural and *declarative memory* (Klein and Nichols 2012), which concerns itself with facts and beliefs. Out of all the bleed components, procedural bleed is most likely to have a stronger connection to procedural memory than declarative. Given to the degree that we tend to be cognitively unaware of our procedural memory, procedural bleed might have a high perception threshold, meaning that the effects of this bleed component rarely cognitively register with many players and will therefore go unreported. Memory is addressed in more detail later in the paper.

3.5 Higher Bleed Complexes and Identity Bleed (IB)

3.5.1 Ego Bleed

When Beltrán first suggested the term ego bleed, she pointed to the aforementioned lack of specificity and ambiguous use of the general term. Ego bleed was then defined in opposition

to emotional bleed, as the spillover not of emotion but of (among others, archetypal) identity patterns during play (Beltrán 2012). Ego bleed is an important concept to incorporate into the language of depth psychology when discussing larp because, when addressed as a directional spillover of traits from character to player (*ego bleed-out*), it gives a name to one of the mechanisms of the process of *individuation* that Jung (1976) describes. When players actively engage an archetype, they directly experience modes of behavior, thought, and emotion from which their psyche can learn if it can successfully integrate these experiences into their ego identity. This individuation process leads to the ego then evolving to become a more mature Self (Beltrán 2012, 96; Bowman 2017).

As mentioned above, ego bleed exists in very close connection to the complex of identity bleed and can be considered a subcategory of it. Also, insofar as archetypes are understandable as cultural constructs (Bowman 2012), aspects of ego bleed do share similarities with memetic bleed.

3.5.2 *Emancipatory Bleed and Relationship Bleed*

While the complex of emancipatory bleed (Kemper 2017, 2020) has been articulated at length by theorist Jonaya Kemper, the complex of relationship bleed, although written extensively around, has not yet been defined specifically by theorists. However, relationship bleed is an established concept in the discourse and the working definition I provided above is distilled from a colloquial use of the term (Harder 2018) and academic discussions around it, particularly regarding romantic bleed (Waern 2010; Bowman and Hugaas 2021). Thus, as these two concepts are established, they fit well into the suggested model as they are.

3.5.3 *Identity Bleed*

I further theorize the complex of identity bleed, which refers to how our sense of self and our multiplicities of identities are affected by bleed experiences. As a higher complex, identity bleed contains parts of all of the above-mentioned basic bleed components. The effects of identity bleed have been reported -- albeit not named as such -- by players, e.g., in relation to sexual orientation (Paisley 2015) and gender identity (Moriarty 2019; Baird 2021).

4. CREATION OF IDENTITY

As this paper is the first attempt at creating a conceptual model for bleed concepts, I will briefly discuss related theories on identity creation from other fields, as the model is informed by the mentioned theories and does not stand in opposition to them. While the potential for further study in the intersection between the proposed model and the covered theories is potentially quite significant, for now I will focus only on general connections between central tenets.

Over the years, scholars have presented numerous theories for how identity is created. James' (1890) made an initial distinction between the self as "I" and the self as "me, arguing that an individual could be considered either as an object or a subject in any given experience. As a result, James introduced the idea of an individual's identity being composed of several parts (James 1890). The theories I present this paper all share this understanding and it is also central to understanding how our sense of self can be affected through the phenomenon of bleed.

4.1 Stages of Psychosocial Development and Identity Achievement

In his theory on the stages of psychosocial development, Erikson (1950) describes the ego-identity as created partly by a) the person's characteristics and personal development; and partly by b) social roles and cultural roles. He dividing a person's lifetime into 8 distinct stages, mapping out how each stage emphasizes a conflict between an inner, agentic trait/ability and an external social and cultural force that opposes it. The result of these conflicts influences and sometimes even decides what beliefs and skills the person subsequently can integrate into their sense of self and take with them to the following stages of their life. Regarding the fifth stage of psychosocial development, which is broadly defined as the years from 11-19 and which Erikson named "identity vs. role confusion," he argues that the individual's sense of identity is normatively consolidated, leading to the individual experiencing either identity resolution or confusion at the end of it. The degree of integration of virtues from previous stages will affect whether a person's sense of self is stable or in a state of diffusion, potentially leading to what Erikson coined an *identity crisis* at the end of the stage (Erikson 1950).

Building on Erikson's work, Marcia's (1966) theory of identity achievement posits that the identity formation observed in adolescents is dependent upon the extent to which the individual has explored, discovered, and committed to their identity in relation to a number of different fields, such as among others: politics, religion, gender, and sexuality (Marcia 1966). Where Erikson has been criticized for creating a theory that fits very well for a specific group of people (White, Western, middle class, males) at a specific point in time, Marcia's approach seems more open to a wider selection of lived experiences. In addition, identity achievement can be applied to shifts in identities later in life, providing a more flexible understanding of the fluidity of identity beyond adolescence.

In relation to role-playing games, they provide players not only with a space in which to explore and study the conflicts in Erikson's theory; they do so while simultaneously offering the freedom to embody a character at any of the eight stages. They permit players to change and adjust both the internal and the external factors as one wishes. Furthermore, role-playing games provide players a space in which to experience potentially underexplored parts of themselves (Bowman 2010), as described in Marcia's theory of identity achievement. In other words, role-playing can provide the participants with an environment in which to experiment with greater levels of safety, thereby potentially developing a better understanding and even a higher level of processing of their own lived experiences. Through character enactment, role-playing also provides a space in which players can prepare for stages that they themselves will live through in the future.

With regards to identity achievement theory, identity bleed happens when a player is able to experience a so far underexplored part of their own identity through play. This experience can further impact their sense of self by facilitating for commitment to this newly explored part of their identity. This process fits well with the below described concept of *identity verification*, in which players can experience alignment between their own and others' perceptions of their identities while in-character.

4.2 Identity theory

Based in structuralist symbolic interactionism, identity theory (Stryker 1968) broadly defines identity as a set of meanings attached to the different roles that an individual performs in

social structures, groups to which they see themselves as belonging, and unique qualities they see themselves as possessing (Stets and Serpe 2013). In symbolic interactionism, meaning is created and derived from social processes. Since it is difficult, even near impossible to predict individual human behavior through theory-based models (Blumer 1969), this process indicates that perhaps identity too is a process of constant confirmation, iteration, and alteration. In other words, although there are numerous ways in which social structures seek to impose rigidity (Kuhn 1964), identity is at its core fluid, not fixed. This definition of identity itself becomes particularly relevant with regards to role-playing; often one of the aims of the activity is to restructure, reimagine, and reinterpret social structures, group belonging, and personal traits within structured frames that actively seek to counter the rigidity that social structures tend to impose on social interaction.

One of the central concepts of identity theory is verification. Identity verification occurs when we experience that the way we perceive ourselves and the way others perceive us are aligned. In short, when an individual feels that their identity is verified by others, they have a positive emotional reaction, and vice versa (Stets and Serpe 2013). Interestingly enough, even when the discrepancy between the two perceptions is positive, for instance when an individual exceeds expectations in a positive way, the resulting emotional reaction is still negative (Stets and Serpe 2013), showing the amount of restriction put on us by our need to verify our pre-existing concepts of our own identity.

Together with verification, identity salience, identity commitment, and identity centrality/prominence form a system that decides which identity or identities are activated in any given situation (Stets and Serpe 2013). In short, salience reflects the probability of a person deciding to enact a specific identity in a situation. Commitment reflects how much effort an individual puts towards verifying their identity. Centrality and prominence are suggested structures for a hierarchical relationship between different identities and are used as indicators of what identity will be active in a given situation. As Stets and Serpe (2013) state:

> The distinction between salience and centrality/prominence is not just conceptual. How each is measured implies a different set of indicators. Salience is based on probable behavior, while centrality/prominence is based on the internalized importance of an identity. (Stets and Serpe 2013, 37)

With regards to role-playing, these central concepts of identity theory open a wide array of interesting implications. For instance, players report how role-playing games have provided them the opportunity to explore aspects of their own identity through playing characters that embody those specific characteristics. If the verification they get in character gives them a positive emotional response, the way that they see themselves (as a player) and the way that others perceive them (as a character) are aligned (Baird 2021). This then provides emotional feedback that can inform their own sense of self as they integrate their experience into their "real life." Using role-playing experiences to explore gender is one example of this (Moriarty 2019; Baird 2021).

Another interesting connection is players reporting that they call upon aspects of characters that they have played in order to tackle "real life" situations. For example, if they have played someone who is very patient and emotionally regulated, they can call upon that character and embody them in a stressful situation, e.g., when players say, "I channeled [character X] to get through it" or similar. Players engage in this practice as a result of believing/ knowing that they too possess the abilities of the character, having "been them" in play. This

ability that players report having might indicate that role-players are generally being adept at consciously affecting the hierarchies of identity selection as a result of practicing them in play. This area would be very interesting for future study.

To understand how identity bleed fits into identity theory, it is firstly important to understand how identity verification forms our sense of self. As mentioned above, identity verification is when the way we perceive ourselves and others perceive us are aligned (Stets and Serpe 2013). In immersive role-playing events, we experiment with creating characters whose identities can be defined as slight alterations of those we perceive ourselves as players to inhabit, or even identities that we carry within us but have not had the opportunity to openly inhabit in the world. As a result, the verification we get from the other characters/players within the held space of the game can lead to identity bleed. Afterward, the experience from the role-playing setting changes the specific identity's salience and commitment, possibly leading to further changes in the player's general identity centrality/prominence.

4.3 Archetypes and Individuation

The *collective unconscious*, a term first presented by psychoanalyst Carl Jung (1976), describes the part of the unconscious mind that incorporates humanity's commonly held memories, instincts, experiences, and similar patterns. From these, Jung theorized the existence of archetypes: universal primal symbols that form from the collective unconscious and that, among other things, can explain the numerous similar characters and themes that exist in the different mythologies around the world. As discussed above, the process of *individuation* describes how an individual moves the archetype out of the collective unconscious as they mature and integrates it into their own sense of Self. In this process, the individual forms a more flexible and authentic *persona* with which they identify strongly compared to the superficial mask they once presented to the world (Jung 1976).

Archetypes are commonly used in character creation in role-playing games (Bowman 2010). They provide a starting point that helps facilitate the creativity of the designer. When characters are explicitly associated with a specific archetype, they can also often be instantly recognizable and become easier for players to embody. Complex character networks and interactions based on archetypes (Beltrán 2021) tend to be quite accessible to participants, providing them with a short-form way of assessing whether or not a particular character is appealing to play. As with many other of Jung's concepts, importantly, the process of individuation is quite complex and contains more than the above-described spillover effect. I focus on this specific part to highlight some of the ways archetypes are part of role-playing experiences.

As mentioned above, Beltrán (2012) theorized ego bleed to be a role-playing specific version of part of Jung's process of individuation. This process of integration of the self has also been explored in depth by Sarah Lynne Bowman (2017), who has identified specific archetypes that she and other players have found useful when seeking personal growth (Bowman 2024). With regards to individuation, identity bleed would affect the player's sense of self in much the same way.

Some archetypal ideas might have stronger connections to cultural constructs, making the following bleed types if not predominantly then at least partly memetic rather than ego. In addition, role-playing provides a wide variety of situations wherein archetypes connected to both player and character can interact, engage in conflict, and resolve through play in ways that can differently inform the individuation process (Beltrán 2021).

4.4 Schemas and Self-Concept

Building the work of philosopher Immanuel Kant (Palmquist 1993), Jean Piaget (1972) suggested in his theory of cognitive development that as they develop, children create and store ever more complex belief and knowledge in *schemas* that are constantly altered and iterated as the child experiences more of the world. *Schemas* are complex cognitive structures used to categorize knowledge about the world. Knowledge and beliefs about the self are similarly stored in *self-schemas*. Our understanding of who we are -- our self-concept -- is the combined sum of all these different schemas (Piaget 1972).

Due to the complexity of schemas, self-concepts are unique to a person, although certain themes tend to replicate from person to person. Among these are physical traits (e.g., I am strong/I am overweight/I am short); personality traits (e.g., I am funny/I am broody/I am smart); and social/group belonging (e.g., I am Norwegian/I am a nurse/I am a father). Some of these schemas depend on external components to both create and sustain them, and even the more internal ones are also heavily influenced by our social setting. For instance, the tendency to focus on physical traits in self-schemas is partly because we expect others to rate, scrutinize, and judge us by them. One could even say that external messaging, be it positive or negative, will often fuel an individual's most strongly held beliefs about themselves.

As for personality traits, these tend to also exist and be reinforced by social settings. For example, "I am strong" would hold little meaning if not in relation to the perceived average strength of others, and "I am kind" would carry little meaning if no one was present to receive one's kindness. In other words, our self-concepts are strongly connected to external ideas of who we are and are deeply defined by our social interactions with others (Jhangiani, Tarry, and Stangor 2022).

As stated above, self-concepts are complex and unique structures. Variations exist in the degree of complexity, with some individuals having far more complex self-concepts than others (Roccas and Brewer 2002). High self-complexity might indicate an individual who has worked in a number of different jobs; has many interests and hobbies; connects with many people in a number of different social relationships; and as a result has many different self-schemas from which to construct their self-concept. Alternatively, someone with low self-complexity might put most of their self-concept into only a few self-schemas, with each schema then making up for a relatively larger part of the person's self-concept. This distinction becomes interesting, as research has found that individuals with high self-complexity enjoy higher levels of self-esteem, suffer less from stress and illness, and show a higher tolerance for frustration (Jhangiani, Tarry, and Stangor 2022).

> The benefits of self-complexity occur because the various domains of the self help to buffer us against negative events and enjoy the positive events that we experience. For people low in self-complexity, negative outcomes in relation to one aspect of the self tend to have a big impact on their self-esteem. For example, if the only thing that Maria cares about is getting into medical school, she may be devastated if she fails to make it. On the other hand, Marty, who is also passionate about medical school but who has a more complex self-concept, may be better able to adjust to such a blow by turning to other interests. (Jhangiani, Tarry, and Stangor 2022, Ch. 3)

With regards to role-playing, the concept of self-complexity presents a number of interesting questions. Being a role-player is a self-schema in itself, which includes numerous possible

sub-schemas related to factors such as one's particular game and system choice, belonging in specific social groups, etc. Furthermore, the experiences that role-players can have in-character might in themselves have the potential to lead to a higher degree of complexity in the player's self-concept. New self-schemas can be created from social relationships both in- and out-of-character, as well as from the player experiencing personality and physical traits differently in-game and out-of-game. In addition, in role-play settings, players get the opportunity to challenge their self-schemas in ways that are difficult to do in other settings. For example, if a player is nervous about public speaking but experiences that they can actually perform public speaking in a live action role-playing setting, that experience can then inform an iteration of their self-schema, e.g., changing it from "I am a bad public speaker" to "I am capable of speaking in public."

As self-schemas are at least partly a result of conscious cognitive processing, some of these changes in self-concept happen without bleed being part of the process at all, although identity bleed can affect the player's self-schemas through all the basic bleed components. As self-schemas are cognitive constructs, memetic bleed is possibly the most prominent of these. In short, when through role-playing games we experience that we have capacities that we were previously unaware existed, our self-schemas change accordingly. Another way identity bleed might affect a player's sense of self is by increasing self-complexity by creating new self-schemas.

4.5 Memory

Memory is intrinsically connected to identity, as our sense of self is informed by remembering things we have done or events that happened to us in the past. This narrativist method of identity creation has deep roots in philosophy; John Locke (1694) argued that personal identity comes from being able to self-reflect and think of oneself as existing over time -- in other words, remembering oneself in previous times and situations.

Contemporary research into long-term memory (LTM) offers a deeper understanding of the role memory plays in creation of identity. In short, LTM can be divided into *procedural* and *declarative* memory, as introduced before. While declarative memory concerns itself with facts and beliefs, for example that Liverpool won the Premier League in 2020 or that Gotland is an island off the Swedish coast, procedural memory concerns itself with the acquisition and retention of motor, cognitive and perceptual skills (Klein and Nichols 2012). Declarative memory can further be categorized into *semantic* and *episodic* memory. Semantic memory is the main storage for generic facts, but they are not tagged with a reference to time or space. For instance, I know that Mt. Everest is the tallest mountain in the world, but that fact is not remembered in the context in which I first learned it. Episodic memory, on the other hand, records events as the individual experienced them, with markers for both time and space. For example, if an individual has actually climbed Mt. Everest, episodic memory will tell them, "I remember the view from the summit when I climbed Mt. Everest last year."

4.5.1 Narrative Identity

While semantic memory provides the facts about ourselves and our traits, episodic memory provides us with a narrative around which to form our identity. The theory of *narrative identity* (McAdams 2011) posits that individuals combine their experiences throughout life into a coherent and structured narrative. This tendency to create a narrative structure of our

lives -- even when the original events might not be too clear to begin with -- has clear benefits. Research has shown that individuals that have experienced adversity and trauma, and who are then able to integrate these experiences into a redemptive arc in their life story enjoy higher levels of mental health, well-being, and maturity (McAdams and McLean 2013).

The theory of narrative identity lends itself very well to role-playing, as narrative arcs for groups, characters, and even societies themselves are a big part of the storytelling (Anderson and Meland 2020; Bowman and Hugaas 2021; Diakolambrianou and Bowman 2023). Through role-playing, participants get to experience and practice creating coherent narrative arcs from often seemingly unrelated, even disconnected events and scenes. In other words, collaborative storytelling provides a space in which we practice injecting meaning into the stories that we tell without having full control of the narrative. Further study into whether experienced role-players are better able to extend this practice also to their "real lives" would be very interesting.

4.5.2 Identification and Memory

In media studies, the concept of *identification* describes instances when an audience member identifies so strongly with a fictional character that they are able to take on a first-person perspective for that character (Oatley 1999). While studying fans of the TV series *Game of Thrones*, researchers found significant neural overlap between when the subjects were accessing information about themselves and when they were accessing information about fictional characters (Broom et al. 2021). They also found that this overlap varied based on how close the subjects reported feeling to the fictional character. The stronger that the subjects felt that they shared traits with the character and the closer they felt to the character, the stronger the neural overlap:

> These results suggest that identification with fictional characters leads people to incorporate these characters into their self-concept: the greater the immersion into experiences of "becoming" characters, the more accessing knowledge about characters resembles accessing knowledge about the self. (Broom et al. 2021, 541)

This strong neural overlap becomes fascinating with regards to role-playing. If simply watching a character on screen has the potential to alter an individual's sense of self significantly, even temporarily, what then can one expect the effects of role-playing said character to be? In particular, the neural overlap brings to the forefront the question of the transformative potential of the embodied experience of live action role-playing games (larp), where "becoming" (as Broom et al. 2021 put it) the fictional character is a central part of the experience itself. Further research is needed into whether a similar neural overlap can be observed with regards to role-players and their characters.

4.5.3 Acting and Role-Playing

In what was reportedly the first neuroimaging study of dramatic enactment, researchers found that portraying a character led to both reduction and even deactivation in specific areas of the brain (Brown et al. 2019). The actors followed the *Stanislavski method* of acting, a technique that shares many similarities with several role-playing traditions, especially live action role-playing traditions that favor immersion, realism, and socio-realistic (and often heavy) themes (Pohjola 2004; Chaos League 2022; Nordic Larp Wiki 2022).

Notably, the actors were not performing a written text during the testing, but were rather asked to answer questions about themselves while in character in a *hot seat* (Stark 2013) fashion. In other words, they were not acting, but rather role-playing during the testing. The difference might seem slight, and there is clearly some overlap between the two activities, but the distinction becomes important when considering real life impact.

This study suggests that acting, as a neurocognitive phenomenon, is a suppression of self-processing. The major increase in activation associated with role change was seen in the posterior part of the precuneus (Brown et al. 2019). Perhaps the most surprising finding of the study was that the British accent condition—during which the participants were instructed to maintain their self-identity while using the accent—showed a similar deactivation pattern vis-a-vis the self that acting did. This result suggests that gestural mimicry of even a completely unspecified other has an impact on brain areas involved in self-processing (Brown et al. 2019, 14).

The theory Brown et al. (2019) posited as a result of their study was that embodying a character leads to a certain "loss of self," in which areas of the brain related to self-processing either see less activity or are deactivated. If we were to apply self-presentation theory (Goffman 1959) to these findings, we could expect to see a similar decrease and deactivation when an individual is performing a social role that is not central to their self-concept, and the opposite when performing a social role that is close to or even a core part of their self-concept. With regards to role-playing, we would call the first example an instance of playing *far from home* and the second *close to home*. These two terms are widely used among role-players, and there are some general ideas of how playing close to home can, among other things, increase the chance of bleed (Jeepen 2007; Bowman 2013). This area has great potential for further study; for example, the method used by Brown et al. (2019) could be applied to role-players and a study could be conducted along an axis of *far from* or *close to home.*

4.5.4 Identity Bleed and Memory

With regards to memory, several possible connections arise regarding identity bleed. First, consider how Broom et al. (2021) found significant neural overlap when accessing memories about a fictional character and when accessing memories about oneself. As I discussed with regards to procedural bleed, a connection exists between that basic bleed component and the procedural part of long-term memory. Procedural memory is where we store physical traits, perceptual experience, and motor skills. Considering how strong the connection between an individual's physical attributes and their self-schemas are helps us understand the important part that an individual's perceived physical abilities play in how they construct their sense of self. If we then develop physical abilities through play, or if physical capacities that were unknown to us are revealed through play, our sense of self will subsequently be influenced by our experiences through the process of identity bleed.

It is also important to understand that experience and memory are not the same. While something we experience can create a memory, numerous ways exist in which the memory might not recount the whole experience or might not recount the experience as it happened. The theory of narrative identity concerns itself with this subjectivity of memory when it posits that we create life narratives: coherent stories about our lives and how the events we have experienced have made us the people that we are today. The creation of a coherent story arc from often disjointed and random experiences is something that role-players engage with frequently in play.

When players experience that they are able to embody traits in-character they were unaware of possessing or can react to challenges in ways that they did not think themselves able, these experiences can inform how they consider their own capacities outside of play. Consider a player who experiences that they are resilient in the face of adversity in-character, who then is able to incorporate that resilience into their sense of self through identity bleed post-game. When the player believes themself to be resilient in the face of adversity, challenging experiences in their past can be examined in a new light. This process can have profound effects on an individual's sense of self; as mentioned above, individuals that are able to create a narrative arc of redemption about the adversities faced in life tend to enjoy higher levels of mental health, well-being, and maturity (McAdams and McLean 2013).

5. LIMITATIONS

This is a theoretical work that is based on previous theoretical work. While the paper contains connections that have not been suggested previously and structures previous findings in relation to each other, no new data was gathered as part of this work. This practice is intentional, since the aim of the paper is to create a theoretical framework for future research and testing.

6. CONCLUSION

The ways in which people create a sense of self have been described in different fields, ranging from psychology to neuroscience. Role-playing games often experiment with the different parts of identity about which these fields have established theories, but direct theoretical connections between role-playing concepts and topics in these fields are so far few. The role-playing term bleed is an example of a term used both colloquially and in academic discourse that lacks the mentioned connection to other fields. The use of the term also suffers from a lack of specificity and the fact that the different suggested types of bleed have not been structured in relation to each other.

The presented conceptual model on bleed, with the concept of the bleed perception threshold and the introduction of the higher bleed complex of identity bleed, forms a theoretical framework around how these processes can lead to changes in a player's sense of self. With this conceptual model as a foundation, further research into how bleed affects players might hopefully be conducted with greater ease.

This paper has suggested potential connections between the role-playing concept of bleed and Erikson's theory on stages of social development (Erikson 1950); Marcia's theory of identity achievement (Marcia 1966); Jung's theory of self and the process of individuation (Jung 1976); the idea of self-concept and self-schemas following Piaget's theory of cognitive development (Piaget 1972); Stryker's identity theory (Stryker 1968); self-presentation theory (Goffman 1959); and neuroscientific studies on memory construction, processing, and recollection (Klein and Nichols 2012; Brown et al. 2019; Broom et al. 2021).

For game designers who wish to create games that facilitate the transformation of the player's sense of self, understanding the connections between bleed and identity is crucial. Future work that maps out the practical ways in which the aims of the game design can be achieved would be of value.

For future academic work, the following list contains suggestions for research approaches that could apply and test the model:

- How people through play experience parts of themselves that are underexplored in connection to identity achievement (Marcia 1966), identity verification (Stets and Serpe 2013), and self-presentation theory (Goffman 1959);
- How role-players compare with non-players with regards to ability to construct redemptive life stories, e.g., positive narrative identities (McAdams 2011; McAdams and McLean 2013);
- The neurological difference/similarity between the "becoming" of identification (Oatley 1989) and the "becoming" of character (Broom et al. 2021), with a particular focus on long-term memory (Klein and Nicols 2012);
- *The Bleed Intensity Scale.* Is there a way to measure the subjective experience of bleed with relation to the bleed perception threshold? Which factors can affect the experienced intensity?; and
- The neurological differences/similarities between actors and role-players (Brown et al. 2019). Can the activation/deactivation observed in previous studies correlate with alibi (Deterding 2017)?

This list contains just a few examples of many potential directions in which one could conduct future research. As with any field that concerns itself with trying to understand the human experience, the potential for research around the phenomenon of bleed is quite extensive. I personally want to deepen my own research into factors that influence bleed intensity and the bleed perception threshold.

REFERENCES

Anderson, Ane Marie, and Katrine Jacobsen Meland. 2020. "Bleed as a Skill." In *What Do We Do When We Play?* Solmukohta 2020, edited by edited by Eleanor Saitta, Johanna Koljonen, Jukka Särkijärvi, Anne Serup Grove, Pauliina Männistö, and Mia Makkonen. Helsinki: Solmukohta.

Back, Jon, Elena Marquez Segura, and Annika Waern. 2017. "Designing for Transformative Play." *ACM Transactions on Computer-Human Interaction* 24, no. 3: 1-28.

Baird, Josephine. 2021. "Role-playing the Self: Trans Self-Expression, Exploration, and Embodiment in (Live Action) Role-playing Games." *International Journal of Role-Playing* 11.

Baird, Josephine, Sarah Lynne Bowman, and Kjell Hedgard Hugaas. 2022. "Liminal Intimacy: Role-playing Games as Catalysts for Interpersonal Growth and Relating." In The Magic of Games, edited by Nikolaus Koenig, Natalie Denk, Alexander Pfeiffer, and Thomas Wernbacher, 169-171. Edition Donau-Universität Krems.

Beltrán, Whitney "Strix." 2012. "Yearning for the Hero Within: Live Action Role-Playing as Engagement with Mythical Archetypes." In *Wyrd Con Companion Book 2012*, edited by Sarah Lynne Bowman and Aaron Vanek, 89-96. Los Angeles, CA: Wyrd Con, 2012.

———. 2013. "Shadow Work: A Jungian Perspective on the Underside of Live Action Role-Play in the United States." In *Wyrd Con Companion Book 2013*, edited by Sarah Lynne Bowman and Aaron Vanek, 94-101. Los Angeles, CA: Wyrd Con, 2013.

———. 2021. "Everything is the Self: Designing Character Ensembles for Player Catharsis." Transformative Play Initiative. YouTube, July 16.

Blumer, Herbert. 1969. *Symbolic interactionism: Perspective and methods.* Englewood Cliffs, NJ: Prentice Hall.

Boccamazzo, Raffael et al. 2018. "Am I Really Playing a Role? Identity Exploration in RPGs." YouTube, September 13.

Boss, Emily. C. 2007. "Romance and Gender in Role-playing Games: Too Hot to Handle?" Presentation at Ropecon 2007. Helsinki, Finland. Black and Green Games. http://www.blackgreengames.com/s/Romance-in-RPGs-ECBoss-Ropecon-2007.pdf

Bowman, Sarah Lynne. 2010. *The Functions of Role-playing Games: How Participants Create Community, Solve Problems, and Explore Identity.* Jefferson, NC: McFarland & Company, Inc.

———. 2012. "Jungian Theory and Role-playing Immersion." In *Immersive Gameplay: Essays on Participatory Media and Role-Playing*, edited by Evan Torner and William J. White, 31-51. Jefferson, NC: McFarland & Company, Inc.

———. 2013. "Social Conflict in Role-playing Communities: An Exploratory Qualitative Study." *International Journal of Role-Playing* 4: 17-18.

———. 2015. "Bleed: The Spillover Between Player and Character." Nordiclarp.org, March 2.

———. 2017. "Active Imagination, Individuation, and Role-playing Narratives." *Tríade: Revista de Comunicação, Cultura e Midia* 5, no. 9: 158-173.

———. 2022. "Bleed." Encyclopedia of Ludic Terms. Eotl.org.

———. 2024. "Finding the Self in Role-playing Games: Weaving Myth, Narrative, and Identity." *Media Practice and Education* (March 2).

Bowman, Sarah Lynne, and Kjell Hedgard Hugaas. 2019. "Transformative Role-play: Design, Implementation, and Integration." Nordiclarp.org, December 10.

———. 2021. "Magic is Real: How Role-playing Can Transform Our Identities, Our Communities, and Our Lives." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 52-74. Oslo, Norway: Knutepunkt, 2021.

Britannica, The Editors of Encyclopaedia. 2023. "Defense Mechanism." Britannica, November 15.

Broom, Timothy W., Robert S. Chavez, and Dylan D. Wagner. "Becoming the King in the North: Identification with Fictional Characters is Associated with Greater Self–Other Neural Overlap." *Social Cognitive and Affective Neuroscience* 16, no. 6 (June 2021): 541–551. https://doi.org/10.1093/scan/nsab021

Brown, Steven, Peter Cockett and Yuan Ye. 2019. "The Neuroscience of Romeo and Juliet: an fMRI Study of Acting." *Royal Society Open Publishing* (March 13). https://doi.org/10.1098/rsos.181908

Burke, Peter J. and Jan E. Stets. 2009. *Identity Theory*. New York: Oxford University Press.

Chaos League. 2016. "Southern Way Manifesto." Chaosleague.org, April 25.

Dawkins, Richard. 1976. *The Selfish Gene.* New York: Oxford University Press.

Deterding, Sebastian. 2018. "Alibis for Adult Play: A Goffmanian Account of Escaping Embarrassment in Adult Play." *Games and Culture* 13, no. 3: 260–279.

Diakolambrianou, Elektra, and Sarah Lynne Bowman. 2023. "Dual Consciousness: What Psychology and Counseling Theories Can Teach and Learn Regarding Identity and the Role-Playing Game Experience." *Journal of Roleplaying Studies and STEAM* 2, no. 2: 5-37. https://digitalcommons.njit.edu/jrpssteam/vol2/iss2/4

Durrant, J. D. and J.H. Lovrinic. 1984. *Bases of Hearing Sciences*. Second Edition. United States of America: Williams & Wilkins.

Erikson, Erik. H. 1950. *Childhood and Society*. New York: Norton & Co.

Freud, Anna. 1936. *The Ego and the Mechanisms of Defence*. London: Hogarth Press and Institute of Psycho-Analysis.

Freud, Sigmund/Hubback, C. J. M. 1922. *Beyond the Pleasure Principle.* London,Vienna: The International Psycho-Analytical Press.

Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York: Anchor Books

———. 1986. *Frame Analysis: An Essay on the Organization of Experience*. Boston, MA: Northeastern University Press

Hansen, Jost L. and Kjell Hedgard Hugaas. 2017. "To Bleed or Not to Bleed." Workshop at *Knutepunkt Norway 2017*, February 24.

Harder, Sanne. 2018. "Larp Crush: The What, When and How." Nordiclarp.org, March 28.

Hardy, J.D., H.G. Wolff, and H. Goodell. 1940. "Studies on Pain: A New Method for Measuring Pain Threshold: Observations on Spatial Summation of Pain." *The Journal of Clinical Investigation* 19, no. 4: 649-57.

Henrich, Sören, and Rachel Worthington. 2021. "Let Your Clients Fight Dragons: A Rapid Evidence Assessment Regarding the Therapeutic Utility of 'Dungeons & Dragons'." *Journal of Creativity in Mental Health* 18, no. 3: 1-19. https://doi.org/10.1080/15401383.2021.1987367

Hugaas, Kjell Hedgard. 2019a. "Investigating Types of Bleed in Larp: Emotional, Procedural, and Memetic." Nordiclarp.org, January 25

———. 2019b. "Memetic Bleed: A Tool for Societal and Political Change." Presentation at Knudepunkt 2019, Vejen, Denmark, February 10, 2019.

———. 2022. "Practicing Dying: How Role-playing Games Can Help Us Accept Death and Boost Our Quality of Life." In *Fictional Practices of Spirituality I: Interactive Media*, edited by Felix Schniz and Leonardo Marcato, 137-160. Bielefeld, Germany: Transcript Verlag.

Hugaas, Kjell Hedgard, and Sarah Lynne Bowman. 2019. "The Butterfly Effect Manifesto." Nordiclarp.org, August 20.

Illeris, Knud. 2004. "Transformative Learning in the Perspective of a Comprehensive Learning Theory." Journal of Transformative Education 2, no. 2: 79-89. https://doi.org/10.1177/1541344603262315

James, William. 1890. *The Principles of Psychology, Vol. 1.* Henry Holt and Co.

Jeepen. 2007. "Bleed." Vi åker jeep—the home of Jeepform.

Jhangiani, Rajiv, Hammond Tarry, and Charles Stangor. 2022. *Principles of Social Psychology.* 1st international H5P ed. BCcampus.

Jung, Carl G. 1976. *The Portable Jung.* Ed. Joseph Campbell. Trans. R.C.F. Hull. New York: Penguin Random House.

Kemper, Jonaya. 2017. "The Battle of Primrose Park: Playing for Emancipatory Bleed in Fortune & Felicity." Nordiclarp.org, June 21.

———. 2020. "Wyrding the Self." In *What Do We Do When We Play?*, edited by Eleanor Saitta, Mia Makkonen, Pauliina Männistö, Anne Serup Grove, and Johanna Koljonen. Helsinki, Finland: Solmukohta.

Klein, Stanley B., and Shaun Nichols. 2012. "Memory and the Sense of Personal Identity." *Mind* 121, No. 483 (July 2012): 677-702.

Kuhn, Mandford H. 1964. "Major Trends in Symbolic Interaction Theory in the Past Twenty Five Years." *The Sociological Quarterly 5*: 61–84.

Lankoski, Petri, and Simo Järvelä. 2012. "An Embodied Cognition Approach for Understanding Role-playing." *International Journal of Role-Playing* 3: 18-32.

Lasley, Joe. 2020. "An Examination of Gaming Environments in Dungeons and Dragons Groups." PhD diss., University of San Diego Digital USD.

Laycock, Joseph P. 2015. *Dangerous Games: What the Moral Panic over Role-Playing Games Says about Play, Religion, and Imagined Worlds.* University of California Press.

Leonard, Diana J., and Tessa Thurman. 2018. "Bleed-out on the Brain: The Neuroscience of Character-to-Player." *International Journal of Role-Playing* 9: 9-15.

Locke, John. 1694. *An Essay Concerning Human Understanding.*

Loh, Magdalene. 2021. "Career Design through Serious Play." Transformative Play Initiative. YouTube, 2021.

Marcia, James E. 1966. "Development and Validation of Ego-identity Status." *Journal of Personality and Social Psychology* 3, no. 5: 551–558.

McAdams, Dan P. 2011. "Narrative Identity." In *Handbook of Identity Theory and Research*, edited by Seth J. Schwartz, Koen Luyckx, and Vivian L. Vignoles, 99-115. New York: Springer.

McAdams, Dan P., and Kate C. McLean. 2013. "Narrative Identity." *Current Directions in Psychological Science* 22, no. 3: 233-238.

Montola, Markus. 2010. "The Positive Negative Experience in Extreme Role-playing." In *Proceedings of DiGRA Nordic 2010: Experiencing Games: Games, Play, and Players.* Stockholm, Sweden, August 16.

Moriarity, Joan. 2019. "How My Role-playing Game Character Showed Me I Could be a Woman." Washington Post, October 14.

Müller, Maya. 2011. "From Subculture to Mainstream." In *Think Larp: Academic Writings from KP2011*, edited by Thomas Duus Henriksen, Christian Bierlich, Kasper Friis Hansen, and Valdemar Kølle, 30-51. Copenhagen, Denmark: Rollespilsakademiet.

Nordic Larp Wiki. 2024. "Main Page." Nordiclarp.org/wiki, April 25.

Oatley, K. 1999. "Meetings of Minds: Dialogue, Sympathy, and Identification, in Reading Fiction." *Poetics* 26, no. 5-6: 439-454.

Paisley, Erik Winther. 2016. "Play the Gay Away: Confessions of a Queer Larper." In *Larp Politics: Systems, Theory, and Gender in Action*, edited by Kaisa Kangas, Mika Loponen, and Jukka Särkijärvi, 170-177. Helsinki, Finland: Solmukohta 2016, Ropecon ry.

Palmquist, Stephen.1993. *Kant's System of Perspectives: An Architectonic Interpretation of the Critical Philosophy.* Lanham, MD: University Press of America

Pedersen, Troels Ken. 2017. "Tears and the New Norm." Nordiclarp.org, February 13.

Piaget, Jean. 1972. *The Psychology of Intelligence*. Totowa, NJ: Littlefield.

Pohjola, Mike. 2004. "Autonomous Identities: Immersion as a Tool for Exploring, Empowering, and Emancipating Identities." In *Beyond Role and Play*, edited by Markus Montola and Jaakko Stenros, 81-96. Ropecon ry.

Ribáry, Gergő, László Lajtai, Zsolt Demetrovics, and Aniko Maraz. 2017. "Multiplicity: An Explorative Interview Study on Personal Experiences of People with Multiple Selves." *Frontiers in Psychology* 8 (Jun 13).

Roccas, Sonia, and Marilynn B. Brewer. 2002. "Social Identity Complexity." *Personality and Social Psychology Review* 6, no. 2: 88-106

Sidhu, Premeet and Marcus Carter. 2021. "Pivotal Play: Rethinking Meaningful Play in Games Through Death in Dungeons & Dragons." *Games and Culture* 16, no. 8.

Stark, Lizzie. 2012. *Leaving Mundania*. Chicago, IL: Chicago Review Press.

———. 2013. "How to Plan a Basic Pre-Larp Workshop." Leaving Mundania, November 21.

Stets, Jan E., and Peter J. Burke. 2000. "Identity Theory and Social Identity Theory." *Social Psychology Quarterly* 63, no. 3: 224-237.

Stets, Jan E., and Richard T. Serpe. 2013. "Chapter 2: Identity Theory." In *Handbook of Social Psychology*, edited by John DeLamater and Amanda Ward, 31-60. Springer.

Stryker, Sheldon. 1968. "Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research." *Journal of Marriage and Family* 30, no. 4 (November): 558-564.

Tajfel, Henry, and John Turner. 1979. "An Integrative Theory of Inter-group Conflict." In *The Social Psychology of Inter-group Relations*, edited by William G. Austin and Stephen Worchel, 33-47. Monterey, CA: Brooks/Cole.

Toft, Ida, and Sabine Harrer. 2020. "Design Bleed: A Standpoint Methodology for Game Design." In *Proceedings from DiGRA '20 – Proceedings of the 2020 DiGRA International Conference: Play Everywhere*: 1-18.

Waern, Annika. 2010. "'I'm in Love With Someone That Doesn't Exist!!' Bleed in the Context of a Computer Game." In *Proceedings of DiGRA Nordic 2010: Experiencing Games: Games, Play, and Players.* Stockholm, Sweden, August 16.

Kjell Hedgard Hugaas is a Northern Norwegian game designer, organizer, writer, theorist, and trained actor. In particular, he is engaged within the Nordic larp tradition, where he has been active for a bit over two decades. The last few years he has explored the transformative potential of games, and has proposed specific intentional game design practices that facilitate transformative effects. Hugaas has theorized how ideas impact players through the processes of memetic bleed, procedural bleed, and identity bleed, culminating in his 2022 Master's thesis in Game Design at Uppsala University. In 2023, he completed a second thesis for UU on the impacts of larp on participants' attitudes and anxieties around death. Hugaas is a project assistant in the 2023 Erasmus+ Cooperation Partnership grants EDGE and ROCKET, which integrate role-playing games in higher education. He has also worked in administration, public law, and societal planning and analysis. Hugaas is a co-founder of Evocative Games AB.

Roll for Insight: Understanding How the Experience of Playing *Dungeons & Dragons* Impacts the Mental Health of an Average Player

Abstract: Dungeons & Dragons (D&D) is a fantasy tabletop role-playing game published by Wizards of the Coast. Evidence shows that D&D is being used as therapeutic practice by clinical psychologists, and the reported success of these interventions indicate that it may have positive outcomes for its players. However, there is little research that establishes, from a psychosocial perspective, how playing D&D provides opportunities for supporting frequent player's mental health. Using semi-structured interviews and a reflexive thematic analysis, we aimed to understand better how playing D&D interacted with players' well-being psychologically and socially, as well as exploring factors that may prove challenging or problematic in the therapeutic context. 6 men, 2 women, and 2 nonbinary people participated in the study. Analysis illustrated several processes that are supportive for players' mental health. These features were identified as five key themes: escapism, exploration of self, creative expression, social support, and routine. These findings highlight the transformative potential of D&D in a therapeutic setting, offering insights into its positive impact.

Keywords: mental health, *Dungeons & Dragons,* role-playing games, thematic analysis

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1. INTRODUCTION

This research delves into the exploration of meaning-making and mental health among frequent *Dungeons & Dragons* (*D&D*) players. While *D&D* represents only one type of pen-and-paper game, it is the most common. Our objective is not only to examine documented experiences but also to report on the potential positive effects of processes within the game, offering insights into how it can enhance mental well-being on both psychological and social fronts.

To underscore the significance of our study, we will provide an overview of existing literature on role-playing games (RPGs) and *D&D*, explore motivations behind engagement, outline reported advantages of RPG participation, examine the current use of *D&D* as a therapeutic tool, and explore its therapeutic merits across diverse groups.

In this study, the term "mental health" is employed to encapsulate players' emotional, psychological, and social well-being within the specific context of engaging with *D&D*. The World Health Organization (2022) defines mental health as "a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community." This definition recognises that mental health encompasses more than the absence of a mental disorder. Rather than focusing solely on diagnosable mental health issues, our research explores the broader implications of participation on the players' overall mental well-being. Adopting a holistic perspective, we aim to provide a nuanced understanding of how *D&D* contributes to the overall mental health of players.

RPGs exist at the intersection of four different phenomena: roles, play, games, and media culture (Zagal and Deterding eds. 2024). At their core, RPGs build from a fundamental form of play (make-believe) and social reality/identity (roles), which give the games structure. In most tabletop role-playing games (TTRPGs), one player takes on a facilitator role and guides the other players through a story. In *D&D* this is the dungeon master (DM). The role of the player is to control their own individual character (Kilmer et al. 2023). In *D&D*, each player is invited to create a unique character and assigns them a

class (cleric, fighter, etc), race (elf, tiefling, etc., renamed species in recent publications), and alignment (lawful good, chaotic evil etc). Players are also encouraged to write a character backstory and roll dice for their strengths and weaknesses (ability scores). Equipped with their character sheet and a set of seven polyhedral dice (d4, d6, d8, d10x2, d12, d20) the player is ready to join a party (group of people) and take part in a campaign. The dice are the principal means of simulating chance and probability in *D&D*. For example, if a player wants to walk across an unstable looking rope bridge, the DM may get them to roll a d20 for dexterity. If the player rolls a high number like an 18, they will cross the bridge safely. However, if they player were to roll a low number such as a 2, things might not run as smoothly.

One significant influence on the use of role-playing in therapy comes from psychodrama, which was developed by Moreno in the 1920s (Borgatta et al. 1975). We can also see role-play incorporated into cognitive-behavioural therapy (CBT) (Hamamci 2006; Marriott et al. 2021; Varrette et al. 2023), which uses it as a technique to help individuals practice and develop new skills (Abeditehrani et al. 2021). RPGs, however, have been around since 1974. Fine's (1983) ethnography on RPGs, particularly *D&D*, shed light on how players navigate different perspectives or frames during gameplay. Fine found that *D&D* players operated within three different perspectives or, frames: the player as a person, gaming mechanics, and the perspective of the character. He also explored how players collectively created and maintained this shared fantasy.

There are many reported benefits of playing RPGs. For example, RPGs are reported to encourage players to communicate and resolve conflict (Kowert and Oldmeadow 2013). It has also been hypothesized that they can encourage perspective-taking (Rivers et al. 2016), and provide an opportunity for developing literacy and mathematics skills (Davis and Johns 2020). Furthermore, the interactive nature of RPGs establishes an atmosphere that can enhance social abilities and foster a sense of connection (Davis and Johns 2020). A study on the transformative potential of RPGs (Daniau 2016) highlights the potential for players to engage in collaborative creativity and personal development. Furthermore, a literature review (Lehto 2021) highlights that RPGs can positively impact overall well-being.

Coe's (2017) examination of motivations behind playing TTRPGs using Erikson's developmental psychology framework (1968), suggests that *D&D* is associated with the exploration of identity and the resolution of identity confusion. During this stage Erikson (1968) theorised that adolescents search for a sense of self and identity through exploration of beliefs and goals. Davis and Johns (2020) suggest that playing *D&D* in youth may help with overcoming the struggles within the Eriksonian stages of development. They also link *D&D* to the fourth stage of development (Industry vs. Inferiority). As the player establishes themselves as an important part of a successful heroic team, they can reinforce the view that they are industrious, not inferior (Davis and Johns 2020). This indicates what players may gain from playing *D&D*.

In examining the intersection of *D&D* and mental health, it is imperative to distinguish between the following: running a *D&D* game with the aspiration that it might have therapeutic benefits or running a game with explicit therapeutic goals. *D&D* is currently being utilized for therapeutic purposes worldwide. The Bodhana Group, a nonprofit, advocates the use of tabletop gaming as a directed therapeutic and clinical practice. Their sessions are specifically designed to assist players facing various challenges, such as anxiety, trauma, and impulse control. Game to Grow has developed *Critical Core*, a game designed for home play, aiming to inspire "intentional gaming" and therapeutic benefits. This serves as evidence of some clinical psychologists' confidence in the efficacy of this approach. Bowman and Lieberoth (2024) outline that the authors of clinical cases suggest that the positive impact of *D&D* on mental health stems from camaraderie and a sense of accomplishment.

Notably, specialised therapeutic DMs have the opportunity to steer the game to encourage the use of specific skills/ behaviours (Davis and Johns 2020). Qualitative research has been carried out with

five mental health practitioners who facilitate TTRPGs as a means of intervention (Gutierrez 2017). The effectiveness of the intervention, particularly with adolescents, was emphasized by participants. Participants identified the client-tailored narrative as the intervention's most advantageous feature. Ball (2022) highlights the therapeutic qualities of *D&D*, allowing clients to symbolize their struggles.

In one study, individuals diagnosed with social anxiety were recruited to take part in a year-long *D&D* campaign (Abbott et al. 2022). All participants acknowledged experiencing anxiety regarding making errors in a social context. This is an example of playing *D&D* and exploring how it impacted the group through a therapeutic debrief. Participants reported that playing *D&D* allowed them to make mistakes without debilitating anxiety. TTRPGs were utilised alongside CBT in a study by Varrette et al (2023). Here results showed an average decrease in self-reported anxiety and improved social skills. This study implements elements of CBT into the gaming experience, alongside the use of psychometrics, therefore offering a contrast from Abbott et al (2022). Additional research underscores the advantages of *D&D* in reducing social anxiety and fostering the development of social skills (Daniau 2016; Henrich and Worthington 2021; Sargent 2014).

A scoping review looked at the use of RPGs as a therapeutic tool (Arenas et al. 2022). Here findings suggest the potential to utilise RPGs as a complementary tool in psychotherapies, with *D&D* being the most cited RPG in the studies. A study regarding *D&D* and mental health recovery suggests that it can assist with the development of adaptive skills (Causo and Quinlan 2020). For example, players used their characters perspectives to see their own challenges from a different perspective. There has also been a recent movement towards researching live action role-playing (larping) being used in a therapeutic setting (Bartenstein 2022), where preliminary findings have shown positive outcomes, prompting suggestions for combining larping with CBT (Bartenstein 2022b). Although larping is different from *D&D*, both involve role-playing and improvisation.

Research regarding autistic youth indicate that RPGs are a promising medium for the development of social skills (Brown 2018; Spinelli 2018; Helbig 2019). Autistic youth who participated in TTRPG groups experienced improved ratings on a quality-of-life scale after their participation. Notably, significant improvements were observed in the areas of friendships, and emotional well-being (Katō 2019). For this population, it is possible that RPGs may offer a safe space to gain experience interacting with a complex social world (Kilmer et al. 2023). This further demonstrates that *D&D* has the potential to be used therapeutically for several different groups.

1.2 Research approach

The COVID-19 pandemic has significantly influenced the mental well-being of the public, giving rise to a multitude of mental health struggles (Rajkumar 2020). Interestingly, the sales for *D&D* tripled during this time (Baker et al. 2022). Despite the increasing use of *D&D* as a therapeutic intervention by a select number of psychologists and groups, there remains a scarcity of research exploring the experiences of frequent players and their mental health. This study aims to fill this gap by investigating the transformative potential of *D&D* for mental well-being. Through the use of semi-structured interviews and reflexive thematic analysis (TA), this research will delve into the various features of *D&D* that contribute to the mental health experience for its players. TA is a qualitative data analysis method that involves identifying patterns in meaning across a dataset (Braun and Clarke 2006). The insights derived from this study hold the potential to enhance our understanding of why *D&D* has proven successful in therapeutic settings. Furthermore, we also aim to provide a foundation for understanding how the game might be used as a tool in the future.

2. MATERIALS AND METHODS

This study aims to understand what the experience of playing *D&D* is like for the mental health of a frequent player, and what features scaffold this experience. Through the application of semi-structured interviews, various facets of the role-playing experience were explored. This research was approved by the University Ethics Committee.

2.1 Participants and sampling

The study required participants to be over the age of 18 and have a minimum of one year's experience frequently playing *D&D*. Here, "frequent" required players to have a minimum of one years' experience playing weekly/ bi-weekly. Furthermore, players must still be playing frequently. 10 participants were recruited through the *D&D* subreddit, and word of mouth. 6 men, 2 women, and 2 nonbinary people participated in the study and their ages ranged from early 20s to 50s. Participants were not asked if they had any mental health diagnosis. Recruitment was operated by interviewing the participants who volunteered first. Cultural influences can play a role in shaping individuals' experiences and attitudes, and the inclusion of participants from various national backgrounds enriches the depth and breadth of insights gained from this study.

2.2 Pseudonyms, gender, location, and character

- Matt, man, Ireland, Barbarian with a homebrew race
- Chris, man, Ireland, Kenku Warlock
- Derek, man, Ireland, primarily acts as DM
- Jason, man, Ireland, Tortle fighter
- Charlie, nonbinary, Ireland, Dragonborn paladin
- Nat, woman, the United States, Halfling ranger-rogue
- Andy, man, the United States, various types of Halfling
- Emily, woman, the United Kingdom, Wood elf monk
- Kameron, man, the United Kingdom, Water genasi sorcerer
- Ash, nonbinary, the United Kingdom, Dragonborn cleric

2.3 Semi-Structured Interviews

This method follows from the phenomenological position as there is a desire to enter the psychological and social world of the participant who is seen as the expert (Currie 2005). The interview schedule (Appendix I) began with general questions, how the participant discovered *D&D* etc. As the interview continued, probing questions were introduced. These questions explored their characters, and whether *D&D* has had an impact on their life. The participants who acted as DM were also asked about the experience of creating a world and running the game.

2.3.1 Thematic Analysis

TA was chosen as it is a powerful tool in the recognition of patterns of meaning across a dataset (Willig 2013). It is an accessible and theoretically flexible approach in the analysis of a qualitative dataset (Braun and Clarke 2006). The process of TA began with line-by-line coding, which later resulted in the generation of themes. Each theme captures something about the dataset that is meaningful or relevant

to the research question. Not only are the themes influenced by the research question, but also the epistemological standpoint taken by the first author. The first author adopts a realist epistemology and an idealist ontology. Therefore, themes were constructed around dimensions invoked by the participant (Willig 2013).

This study takes an inductive approach, and the data was analysed without the researchers trying to fit it into an existing coding frame. A realist stance was taken as the analysis outlines experiences, meanings, and the reality of the participant (Braun and Clarke 2006). The first author believes that through a realist stance, the analysis presents knowledge that, as truthfully as possible, reflects what is happening for the participant. An idealist ontology believes that research knowledge consists of subjective experiences obtained through observation, that is influenced by the researcher's interpretations (Giacomini 2010).

2.3.2 Procedure

Correspondence was carried out over email where each participant received an information sheet, and consent form. Interview times and dates were scheduled for when was most convenient for the participant. Three of the interviews took place face-to-face, and seven over Skype.

2.3.3 Apparatus

Each interview was recorded on a digital voice recorder device.

2.3.4 Analysis Procedure

Each transcript was analyzed in its entirety through TA which began with the transcription of each interview. Following this, line-by-line coding was carried out, followed by secondary coding and the generation of themes which, were then reviewed, defined, and labelled. Themes were generated through an in-depth analysis of patterns amongst the codes.

2.3.5 Ethics

Pre-interview, each participant was fully debriefed on the study. The information sheet presented to the participants covered their anonymity and right to withdraw. All identifiable information within the transcripts has been removed and each participant has been given a pseudonym. Participants signed a consent form which was scanned onto an encrypted laptop. The hard copies were destroyed. Audio files of the interviews were kept on the recording device and wiped post transcription. Access to these transcripts will only be had by the first author and the project supervisor and will be stored for ten years on the university server.

3. RESULTS AND DISCUSSION

Through a thematic analysis of 10 semi-structured interviews, participants outlined their experiences playing *D&D*. The process of playing was described as primarily a positive and rewarding experience which provided opportunities for personal development and growth. For many, this had a transformative effect and positively impacted their everyday lives. Players devoted a significant amount of their time to the game and related activities (podcasts, etc.) each week. This indicates that needs are met through the game. Players attributed their positive experiences not just to the enjoyment of the hobby but

specifically to various aspects within the game itself, including its mechanics and the environment it fosters. As outlined by Kameron:

> I could go from bee to bee and get a little bit of honey, but I could also go straight to the hive and get a whole load of honey in one go, right? So, I feel like maybe I would have got the honey piece by piece by going around doing all these activities but with *D&D* I feel like…I'm going straight to the hive.

This experience implies that playing *D&D* provides players with a greater degree of satisfaction, in a shorter timeframe, in comparison to other activities. Furthermore, other activities may require a longer time commitment to attain similar levels of satisfaction,

However, participants also acknowledged certain negative aspects, such as interpersonal conflicts with other players or challenges within the game. It was noted that while the escapist nature of *D&D* can offer numerous benefits, there is a potential downside if it is used as a means to neglect real-life problems.

Through the analysis, it was discovered that aspects of *D&D* scaffold a positive mental health experience for its players. These features were identified as five key themes, and two sub-themes:

    a) escapism;
    b) exploration of self;
    c) creative expression;
       i. providing for others;
    d) social support;
       i. safe space; and
    e) routine.

1.1 Escapism

A strong focus was put on escapism and the positive impact this had on players' mental health. As Matt describes, *D&D* is a "refuge." Jason, Nat, and Andy label D&D as an escape. This positive influence is intricately tied to the expansive possibilities within the game. As described by Nat, "Escapism. Honestly. There's nothing more amazing than being able to do the things you didn't think you could do." This suggests a desire to escape to a virtual world (Dolgobrodova 2015), where players are encouraged to explore identities beyond their own. Jason echoes this sentiment stating, "I get to sit back and relax and forget about any worries that are ongoing… nothing exists outside of the room and off that table." This aligns with the notion that the success of RPGs is linked to the escape they offer from psychological stressors in primary reality (Coe 2017).

Escapism was the primary aspect of *D&D* that provided Jason with a positive experience. When asked how it has impacted his life, he states:

> I would honestly say, my mental health. As well as my own, other people who come to me with their problems, I would be a pillar of support for a lot of my friends. It allows me to…cause when you're living in your own head, 24 hours, seven days a week… it's a lot but, if you get to get away from that for even 4 or 5 of those, it's a big relief, it's a big breath you can take.

Jason demonstrates the pressure that is put on him in his personal life, and how escapism drew him to the game. He utilises *D&D* as a tool to step away from his stressors in life (Coe 2017). Jason found *D&D* at a time when he had lost a family member and felt pressure to keep up morale. "It drove me down a dark place… I kind of regressed into myself." The player then describes finding this escape as

a "glowing hand that pulled me out of that dark place." For this player, *D&D* had a profound impact of his mental health and acts as a "pillar of support" for him, as he is to his friends. This profound impact aligns with the transformative potential of *D&D*, offering support and healing for players (Gutierrez 2017).

Removing oneself from their everyday life is a reoccurring thread. Emily states, "You don't think about your everyday life during it." Similarly, Jason states, "I want to forget that I have work in the morning and that I have no money in my bank account." The player goes on say that the escape of playing positively impacts his mood for days after, further indicating that escapism has a transformative effect for its players. RPGs offer an escape from social constraints (Fine 1983), and provide a sense of control, particularly valued by players like Emily, who states, "I think maybe that sense of control is good for some people." Lloyd et al. (2019) suggest that this "controllability" may attract people to gaming who feel a lack of it in the real world.

However, it is essential to note potential difficulties associated with escapism. As Matt describes, "I can go home now but that's when my worries start to creep in." Whilst escapism serves a restorative function, it could also be perceived as having avoidance related functions. Although players are offered an escape whilst playing, they must return to reality once the game is done. If escapism is solely used to avoid worry and responsibility, it may contribute to ill impacts on the player's life. As discussed in past literature (Kuo et al., 2016; Chen and Chang 2019; Melodia et al. 2020; Bowditch et al. 2024), stress may be a leading factor in a need for active escapism, which is where an individual interacts with a mediated reality. However, escapism can also hinder direct addressing of negative emotions caused by stress.

3.2 Exploration of Self

The functions of RPGs encouraged players to explore their identity (Bowman 2010). Five players outlined how they utilized *D&D* as a form of self-exploration. Some employed role-playing as a tool for practicing skills whilst others used the game to navigate their problems. As outlined by Bowman and Hugaas (2021), "When we imagine ourselves becoming someone else, we tap into our latent potential as human beings and as a community." Similar themes were identified by Ball (2022) where "expression through play" and "working through difficulties" were superordinate themes.

Nat explored her self-confidence through the game,

> When I started to look at what type of person I wanted to be, I was like, "You know, I really don't stand up for myself" and I started testing that by playing her [character] in the game as somebody who would go "actually I think we should do this instead" and it started to really show that you can do that.

The process of playing a confident character evolved over time and Nat found herself thinking, "This character would have done a lot better at this" in her day-to-day life. This became a transformative experience for her: "I've become a lot more confident in myself." The phenomenon where a player's emotions and thoughts begin to spill over between in-game and out-of-game is known as *bleed* (Montola 2010; Bowman 2013). It is suggested that bleed can assist the player in forgoing social pressures and provide a space where they can approach challenging issues (Adams 2013). Nat is using her characters confident nature to positively impact her life outside of the game. This is referred to as *bleed-out,* as a character's actions and experiences are impacting the player (Bowman and Lieberoth 2018). Confidence bleeding over more permanently into daily life can be referred to as *ego bleed* (Beltrán 2012). Beltrán (2012, 96) describes the phenomenon as pertaining "less to emotions and more to the transference of overall identity patterns during play, both in immediacy and over time." Furthermore, ego bleed refers

to the mutual exchange of personality fragments between the player and their character, creating a two-way channel. This is significant as there is a change in personality for Nat. Through the freedom of imagination, Nat can see herself as capable in ways she may previously have felt limited (Bowman 2021). It is also suggested that direct links exist between confidence and well-being (Mann et al. 2004).

Emily, when speaking about mental health, found it "easier to put it on your character and say your character is dealing with it." This links to framing (Eklund 2012), as the player feels more comfortable exploring her problems in a space that is separate from the real world. Like Nat, playing *D&D* has positively impacted Emily and her levels of confidence (bleed-out + ego bleed). Emily uses *D&D* in a transformative way known as *steering* (Montola, Stenros, and Saitta 2015; Pohjola 2015), which is when a player directs the actions and decisions of their in-game character for reasons that are external to the game world. Using her character as a transformative tool has provided Emily with a positive mental health experience. Furthermore, accepting flaws in a character could be way towards self-acceptance (Poeller et al. 2023). Past studies (Karatay and Gürarslan Baş 2017; Duchatelet et al. 2021; Chen and Syu, 2024) have also reported that role-playing is linked to an increase in self-efficacy, and self-esteem outside of game Zayas and Lewis (1986). This supports the feelings had by these players.

Jason primarily uses his experience DMing to reflect on his emotions:

> If I'm feeling particularly down any day or week, I might bring in a dark, deep monster who might represent an emotion that I went through that week. This year I lost my grandfather, and I was feeling quite down about it and for a while brought a really dark entity into the campaign who annoyed and patronized and hurt the characters and they were able to fight it back and even watching them do that was like, a release for me.

Like Emily, this player is steering by placing characters in-game that represent strong emotions or events. The process of bleed-in is present here, which occurs when aspects cross over from a player to their character. Jason is steering towards a bleed-in effect to improve his own well-being and experience catharsis. Being able to engage in steering and bleed-in simultaneously is somewhat unique to the role of the DM as they have the power to guide the story. Jason's experience also draws parallels to shadow work (Beltrán 2013), where processing grief through in-game monsters serves as a form of therapeutic expression, a grief which may have otherwise been repressed. There has also been links made in the literature between RPGs and the processing of grief (Brown 2018; Causo and Quinlan 2021; Arenas et al. 2022; Ball 2022), whether this be an external grief, or an internal grief within the game itself.

As stated by Charlie, "A lot of *D&D* characters come from parts of people that they can't normally express," which can also link to shadow work (Beltrán 2013). Players often resolve things for themselves through a rationalization mechanism called *alibi* (Montola and Holopainen, 2012), which sets the player apart from in-game actions/events (Kessock 2013). Each player is in an understanding that the actions in the game are those of a character. Therefore, the players character can be referred to as a buffer (Gutierrez 2017), which can express things that they normally would not.

Charlie ties their characters back to their "own experience of depression and loss" and tries to "make them all into kind of redemption stories." This relates to Rosselet and Stauffer (2013) who outlined the benefits of using buffer characters. Charlie realises that they find speaking about their emotions "difficult" however, when they put these emotions into their character, they can speak freely:

> I don't want to say it's a mask but it's almost like a mouthpiece that you can use to talk about your emotions that you feel…I think it's a really effective method of getting out how you feel without necessarily having to say that's how you feel…if you get me?

This links to framing (Eklund 2012) as the player utilises their character as a buffer to work through difficult emotions whilst simultaneously distancing themselves from it. This is an intrinsic part of *D&D* for Charlie as it has allowed them to speak openly about their mental health. There are no real-life consequences for the player as they are putting their problems on a character.

Although this has proven beneficial for this player, it is important to keep in mind that the reactions of the other players may impact on this experience. For instance, a negative response from fellow players might evoke feelings of shame. This, in turn, could discourage them from future instances of vulnerability within the gaming context. It must also be acknowledged that a player exploring difficult topics and emotions in-game can negatively impact the other players in their party. For example, if a player is processing intense emotions without the consent of others, this may be triggering.

Given the potential negative consequences associated with gaming spaces, it is crucial to incorporate check-ins. The DM plays a pivotal role in facilitating a safe environment for players to openly discuss their triggers. This proactive approach enables the group to collectively avoid potential issues and ensures that everyone feels comfortable and respected during gameplay. If *D&D* were to be run therapeutically, the DM can take steps to develop goals for the group or individual players. This process may begin on a one-on-one basis. Then, the party could convene for a Session 0 (a meeting that takes place before the campaign to establish the desired social environment). Useful resources would be the Consent and Safety Checklist (Reynolds and Germain 2019), and the X-Card (Stavropoulos 2013). A player holds up the X-Card to let the DM, and other players know that they are uncomfortable with the current in game topic.

Encouraging the use of such tools reinforces the commitment to maintaining a supportive gaming environment. If it is a safe and considerate environment, it can be seen as a transformational container in which we can explore and develop our self-concepts (Bowman and Hugaas 2021). Approaching the game in a trauma-informed way is crucial, particularly when simulating challenging events. When conducted with sensitivity, this may provide opportunities for players to engage in "redemption stories," fostering resilience and a deeper understanding of complex experiences (Polkinghorne et al. 2021).

This theme underscores one of the most potent tools in role-play. When engaging in role-play, we embrace a state of dual awareness (Bowman and Hugaas 2021), experiencing our characters subjectivity, and our own. The new perspective gained through a character may act as a catalyst to challenge our own self-concepts. The idea of utilizing RPGs as a way to explore one's identity is explored in depth by Bowman (2010).

1.3 Creative expression

RPGs cultivate spaces that offer clear paths to creativity (Kilmer et al. 2023). A survey report by Meriläinen (2012) highlighted that over 73% of players reported improved creativity, and 70% reported improved imagination. Our study echoes these findings as all players identified *D&D* as a creative outlet. Providing for others is a subtheme of this. This theme links directly to research by Chung (2013) which found that TTRPG players had higher creativity scores (e.g., divergent thinking), than non-players. Here, divergent thinking is a predictor of potential for creativity. Furthermore, research on the effectiveness of using RPGs for creativity training has demonstrated statistically significant increases in measures of creative thinking and imagination (Karwowski and Soszynski 2008).

As described by Jason, *D&D* offers players "explosions of creativity." Charlie adds that the game acts as an artistic expression, providing a vital outlet for their emotions. This implies that creativity serves as a protective measure to prevent emotional stagnation or overwhelm. The longstanding connection between creativity and mental health, evident in art therapy since the 1990s, is mirrored in *D&D*. Players wield creative agency over their characters, with Andy describing *D&D* as "good

mental creative time" and an avenue for his creative expression. As someone who has always engaged in writing, Kameron describes creativity as "a big part" of his "sense of self." *D&D*, for him, is a conduit to release creative energy. "I feel like I'm always wanting to write stories, always wanting to create things and *D&D* is like, I can just plug that pipe into my brain and let all the excess flow into that." Creativity and curiosity, identified as crucial human traits by Csikszentmihalyi (1997), play a pivotal role in societal progress. People also possess psychological needs, such as creativity, which, as noted by Runko (2005), tap into inner creative resources that can facilitate recovery. Reeve (2005) aligns with this perspective, suggesting that creative curiosity is intricately linked with fulfilling one's psychological needs. Participants recount how creative expression in *D&D* positively impacted their mental health, correlating with research linking role-playing to higher levels of originality (Karwowski and Soszynski, 2008).

For Matt, *D&D* offers an outlet in which he can express himself and feel release:

> I think the biggest part of D&D for me has been that creative aspect of it and just like, just to emphasise that is the biggest effect that it has had on me and the biggest thing I associated with it when I'm thinking about positive effects that it's had on me.

This association suggests that the creative process has become a defining feature of their engagement with the game. Research indicates that participation in RPGs can improve a player's creative potential (Dyson et al. 2016), and such is demonstrated here. By actively participating in the creative process of world-building and character development, players not only exercise their creative potential, but also experience a deep sense of immersion.

Similar to Matt, *D&D* came at a time for Chris when he was struggling with his own motivation. This player describes the "massive impact" on his mental health. In previous years the player had been on a "downward path" and pinpoints the creative freedom in *D&D* as being the major catalyst for change in his mental health:

> It's definitely brightened up my life in huge ways and again, it's kickstarted my own creativity again and my own motivation to do things because I did struggle with motivation to do anything for a while, but it's definitely been a hugely positive impact… I've been happier since I started playing.

This conveys a profound positive transformation which can be attributed to *D&D*. Beyond the enjoyment of the game itself, the creative stimulation, and motivation provided had a meaningful and lasting impact.

Motivation, defined by Reeve (2005), is a process giving behaviour its energy and direction. Past research (Yee 2006; Bowman 2010; Burenkova et al. 2015) demonstrates that creativity is a significant motivator in role-playing. As demonstrated above, *D&D* players are motivated to fulfil their psychological need to be creative.

3.3.1 Providing for others

A successful DM is dedicated to the enjoyment and satisfaction of their players (Cogburn and Silcox 2012). For example, Nat enjoys "watching people discover aspects" of her stories. This aligns with research indicating that expressive writing and creativity contribute to positive mental health experiences (Stuckey and Nobel 2010).

For Derek, the ability to evoke positive emotions from players becomes a lasting source of enjoyment, positively impacting his mood over the next few days. This highlights how *D&D* can serve as an ongoing source of satisfaction. For Jason, he gets to:

> watch them laughing and to watch them get emotional when the characters are about to face turmoil, watching them rattling their brains at decisions when I know the answer, it's very humbling and there's a great sense of satisfaction out of it.

His use of the term "humble" reflects a deep appreciation for the impact he has on players' experiences. These perspectives highlight the diverse ways players can find fulfilment.

Similarly, Chris benefits from sharing his creative expression and provides others with a positive experience:

> …that's what I love as a DM is, knowing that I'm not boring everyone, that everyone's having a good time and are engaged and that they are enjoying the story that I'm trying to tell with them because, it's all, for me, it's all about them more than it's about me telling my story and it being my game, it's their game that I just happen to be creating the framework for…

There is a sense of accomplishment and satisfaction here as the players are engaged in and enjoying something that the DM created. It is also likely that the DM receives verbal gratitude from their players, adding to their satisfaction. This collaborative aspect is supported by research which acknowledges that TTRPGs effectively foster collaborative creativity (Daniau 2016). The DM, acting as a guide and facilitator, plays a crucial role in orchestrating this collective creative experience, ultimately contributing to the positive mental well-being of all participants.

3.4 Social support

D&D provides players with a community and encourages the formation and maintenance of friendships (Wilson 2007). In our study, playing *D&D* provided all players with social support. For some, this extended to *D&D* being a safe space. Meriläinen (2012) highlighted that 70% of players saw themselves as a part of a community or subculture. 87% formed significant relationships through it. Sias and Bartoo (2007) report the connection between social support and mental health, suggesting that strong friendships promote a positive impact on physical, and environmental stressors. In the United States, social connectedness is decreasing, and loneliness is increasing, indicating that people may not have access to the social support that they need (Abbott et al. 2022)

Players in our study articulate the rapid development of strong bonds with other players. For Andy, many of his *D&D* friendships have "extended beyond gaming." Humans are social beings and human connection/ interaction impacts on levels of happiness (Diener and Seligman 2002). Chris describes these friendships as "long lasting" as *D&D* "breaks down the barriers… because you don't have to be yourself straight away." This element of friendships built though *D&D* is unique. This is supported by research which indicates that role-playing can help players with their social skills (Blatner 2000). Adams (2013) suggests that *D&D* allows players to build friendships that transfer over to their everyday life. Friendships cultivated through *D&D* offer a distinctive blend of creative collaboration and shared interests, providing support both in and outside the game.

For Derek, *D&D* is a connection to a "core group of people." It is his only "social" hobby and has changed the ways in which he communicates with others. This links to research that explores virtual spaces (Wimmer 2014). These spaces can simulate real-life social situations in which players

can practise their skills. Matt, who describes himself as an introvert, acknowledges that if it were not for *D&D*, his social engagement would be limited, which would be to his "detriment."

Nat describes her *D&D* party as friends for life, highlighting the emotional support they provide during her struggles with mental health. "These are the people that… when I felt like I'm at my worst, suddenly come out of nowhere and go, 'Hey, I was worried about you.'" This emphasizes the strong social connections that this player has developed. *D&D* is a collaborative engagement and through this, players can experience group flow whilst feeling connected to each other (Bryan-Kinns and Hamilton 2009). Those who feel supported by their friends tend to live longer and healthier lives, with a more positive outlook when faced with adversity (Taylor et al. 2000).

Emily and Kameron share experiences of loneliness before playing. Emily had just moved to a new city and champions the "collaborative" nature of *D&D* as something that made her feel less alone. Research on moving to a new place (Hendricks, Ludwigs, and Veenhoven 2014) highlights the negative impact that this can have on someone in their 20s:

> It really is, like, my mental health has just… like I said, I was really depressed and anxious before and I just...you know. It's really helped, and I think it is that seeing people.

Emily links her depression and anxiety to her loneliness. For Emily, building friendships and finding social support through *D&D* has improved her mental health and well-being.

Similarly, Kameron discusses his struggles with loneliness. In his 40s, Kameron states that "sometimes as a parent it can be really difficult to socialise outside of the things your kids are doing." Research has found that the suicide rate among middle-aged men is the highest of all age cohorts, with loneliness being a primary cause of distress (O'Donnell and Richardson 2018). This research also highlights the importance of social outlets for one's mental health. Kameron discusses what friendships are like for a middle-aged man and states, "Even friends who are having rough times, they disappear." It has been indicted that this behaviour stems from societal pressures on men to be strong and independent (Oliffe et al. 2018). Kameron believe that these "strong bonds" are forged because players engage in more "intense" moments through *D&D* than they would in other hobbies. The exploration of challenging topics, such as death, within the game leads to shared intense emotions, fostering robust social connections and contributing to positive mental health experiences (Montola 2010). In turn, this provides the players with strong social connections, scaffolding a positive mental health experience.

3.4.1 Safe space

The term "safe space" here follows Advocates for Youth (2012) who define safe space as a welcoming environment where individuals can freely express themselves without fear of discomfort or discrimination. The close connections made through *D&D* nurtured a safe space in which players could open-up to each other. A poignant example is Ash, who used *D&D* as a platform to come out as nonbinary:

> I made my character nonbinary, and they were all obviously completely fine with it and they were asking my character about it and then out of character I told them, "This is all very real by the way" and then carried on talking in-character.

There is a link here to *alibi* (Montola and Holopainen, 2012), as the player is resolving something for themselves in game. Alibi allows the player to create a safe emotional distance from the character, which can allow for greater experimentation (Ball 2022). Furthermore, engaging with this mechanism can deflect negative inference (Deterding 2018), and act as a protective factor. The positive reactions from other players contributed to a positive mental health experience for Ash.

As stated by Kameron, "I guess it's also a safe space, right? We can explore these themes and bad things but aren't really happening, they're just happening in our imaginations." This resonates with Eklund (2012), who discusses how gaming liberates players from judgment and societal constraints. The creation of a safe space through *D&D* has also been acknowledged by Causo and Quinlan (2020), where participants viewed *D&D* as a "respite." As demonstrated, *D&D* provides players with a safe social space which scaffolds a positive experience for its players.

3.5 Routine

Familiarity is one of *D&D*'s most therapeutic qualities (Mendoza 2020). For many groups, *D&D* sessions adhere to a consistent schedule, occurring on the same day and time each week. Participants highlighted this routine as a source of comfort. For Derek, "It becomes part of the routine, it's built into something that I can expect, something that is... it's that idea of, on a boring day, it's a highlight, on a stressful day it's kind of a respite." The consistency here provides stability and solitude. Jason emphasizes the importance of routine: "It doesn't matter if I'm having the worst week in the world because there is a *D&D* campaign at the end of it." Therefore, the anticipation of engaging in the campaign serves as a motivating factor and a positive anchor, irrespective of the challenges he may be facing. Past research has shown that anticipating something can be a positive and powerful emotion (Luo et al. 2018; Monfort et al. 2015). Specifically, looking forward to something has a more positive impact on one's mental health than looking back on it (Van Boven and Ashworth 2007). This highlights the positive mental health benefits of scheduling something fun.

As discussed in theme four, Emily has struggled with depression and anxiety due to loneliness. When asked if the positive change in her mental health was quick or gradual, she states:

> …in the evenings, I wouldn't feel that sort of "ok go to bed because I've got nothing else to do" it was kind of like "oh I've got a day off today and tomorrow I'm going to play and I'm going to see my friends" and just knowing that you actually... I think when I was very lonely in X… just knowing I actually had a group of people who I met regularly and that even though I wasn't seeing anyone that night, it's okay because in two days' time I'm going to see my friends.

This demonstrates how important routine, as well as social support, is for her mental health. The knowledge of upcoming social interactions serves as a protective factor or buffer against loneliness. This aligns with research indicating a positive relationship between routine and the meaning of life (Heintzelman and King 2018), suggesting that having a routine can contribute to improved mental health.

Atanasio (2020) also explores the positive effects of routine and frequent RPG sessions, particularly in older adults struggling with isolation. The scheduled *D&D* sessions provided a regular source of anticipation, prompting increased participant-initiated contact and interaction. This further underscores the therapeutic power of routine in the context of RPGs.

4. GENERAL DISCUSSION

The aim of this study was to explore the impact of playing *D&D* on the mental health of frequent players, and what features promote this experience. We identified five themes and two subthemes that scaffolded a positive mental health experience for players:

a) escapism;
b) exploration of self;
c) creative expression;
   i.   providing for others;
d) social support;
   i.   safe space; and
e) routine.

The themes which arose indicated many transformative features of *D&D*. A strong focus was placed on *escapism* and the positive impact that this had on the mental health of the players. Players reported feeling a sense of control in-game during times when they did not have control outside of it. Therapeutically this is an attractive feature of *D&D*. The theme *exploration of self* indicates that *D&D* has the potential to be utilized in a therapeutic setting, as players felt more comfortable exploring problems/ practicing skills in a space that was seperate from the real-world. Players also reported benefits in their everyday lives which demonstrates a potential transference of skills. In terms of *creative expression* and *providing for others,* participants responded positively to being given creative agency. Furthermore, players are motivated to fulfil their psychological need to be creative through playing. In a therapeutic setting this would allow an individual to create any type of character or scenario that they please. Therapeutically, the *social support* and *safe space* provided by *D&D* may provide players with emotional and social support from a core group of people and offer them a space in which they can express themselves. Lastly, *routine* and the potential for the sessions to occur weekly can provide stability. This demonstrates how playing *D&D* may lead to feelings of autonomy and personal growth.

It is imperative to also examine whether our identified themes are inherently linked to the nature of *D&D* or if they could be attributed to any hobby or leisure pursuit. Regarding *escapism*, this characteristic is directly associated with the immersive and imaginative nature of *D&D* gameplay. Although other hobbies may offer escapism, such may be of a more isolating nature. While the theme *exploration of self* could be generalized to any leisure activity that provides a safe space for introspection, *D&D* uniquely encourages players to confront aspects of their identity in a controlled environment. Whilst many hobbies may allow for *creative expression*, *D&D* uniquely allows players to collaboratively build and inhabit worlds of their creation. While *social support* or a *safe spac*e is a recognized benefit of many group activities, the collaborative storytelling aspect of *D&D* fosters a unique sense of camaraderie and shared experience among players. *Routine* on the other hand, is a characteristic which may be common to most hobbies. Therefore, it is essential to recognize that while some themes may overlap with other leisure activities, *D&D* uniquely encompasses all these elements, offering a comprehensive and immersive experience that contributes to its distinctive therapeutic potential.

As demonstrated, *D&D* can be a transformative experience, bringing a myriad of benefits. There are currently many groups that are already using RPGs therapeutically. Therefore, the potential of *D&D* is already being realized. However, these more prominent groups primarily exist in the United States. Therefore, there is a need to create more of these groups in locations across the globe. There is potential for these groups to assist with skills development, emotional exploration, and problem solving. If run therapeutically, the campaign could support a structured and supportive therapeutic experience. This may would include therapeutic goals, a safe environment, and a collaborative narrative.

The study also hoped to identify factors which may prove challenging or problematic for the therapeutic context. For instance, while escapism can have recuperative functions, it may also serve as a form of avoidance. Furthermore, players may bring sensitive topics into the game, potentially causing discomfort or triggering negative reactions in others. To mitigate these risks, a therapeutic DM should carefully curate storyline content, and foster a supportive and inclusive environment. Additionally,

players should have the option to withdraw from the game if needed. Some players placed their real-life problems onto their character as a means of exploring them. Although this proved beneficial for participants of this study, it is possible that the potential negative reactions of other players may be harmful.

It is important to recognize that while *D&D* can offer therapeutic benefits, it should not replace other forms of support. Instead, it should be viewed as a complementary aspect of a holistic approach to mental health, which may include individual therapy, social support networks, and access to appropriate resources. This perspective is supported by existing research on the therapeutic use of *D&D* (Henrich and Worthington 2021).

In conclusion, our study highlights the positive impact of *D&D* on mental health and emphasizes its potential as a therapeutic tool. However, further research is needed to explore its effectiveness across diverse populations and settings. Additionally, efforts to promote inclusivity and diversity within the gaming community are crucial for maximizing the therapeutic benefits of *D&D* for all players.

5. LIMITATIONS

The results and analysis of this research is limited to the context within which it was conducted. Although the players came from three countries and ranged in age from their twenties to fifties, it can be assumed that all players who volunteered to speak about *D&D* were passionate about it. Therefore, those who were interviewed were more likely to have had a positive experience playing, which may not be representative of every player. We noticed that more volunteers were men. This raises a question about the culture around *D&D*, and inclusivity in the wider gaming community.

6. DECLARATION OF INTEREST

The authors declare that there was no funding received for this work. Both authors confirm that there are no financial or non-financial competing interests to report.

7. REFLEXIVITY

I, the first author, have been submerged in the world of tabletop board gaming for several years. I have been playing *D&D* for five. As a member of this community, I am aware of how playing has impacted on my own mental health. Being self-aware of this fact, and how it may influence my analysis of the dataset, is crucial. Furthermore, remaining self-aware is integral to minimising this impact whilst also recognising that one cannot simply detach. This was achieved through writing a reflective journal. As an autistic person, I analysed the data through a neurodivergent perspective. The second author and project supervisor has worked on diverse research projects, including the design of educational games. His expertise lies in designing and evaluating technology that supports behaviour change.

REFERENCES

Abbott, Matthew S., Kimberly A. Stauss, and Allen F. Burnett. 2021. "Table-top Role-playing games as a Therapeutic Intervention with Adults to Increase Social Connectedness." *Social Work with Groups* 45, no. 1 (16-21).

Adams, Aubrie. 2013. "Needs Met through Role-playing games: A Fantasy Theme Analysis of *Dungeons & Dragons*." *Kaleidoscope: A Graduate Journal of Qualitative Communication Research* 12, no. 1: 69–86.

"Advocates for Youth." 2023. Advocates for Youth, November 16.

Arenas, Daniel Luccas, Anna Viduani, and Renata Brasil Araujo. 2022. "Therapeutic Use of Role-playing game (RPG) in Mental Health: A Scoping Review." *Simulation and Gaming* (March 2022).

Arjoranta, Jonne. 2011. "Defining Role-playing Games as Language-Games." *International Journal of Role-Playing*, no. 2: 3–17. doi:10.33063/ijrp.vi2.190.

Atanasio, Joseph F. 2020. "Why Older Adventurers Can Beat a Lich: How *Dungeons & Dragons* Empowers Older Adults." In Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy, edited by Anthony M. Bean, Emory S. Daniel Jr., Sarah A. Hays, 109-125. Fort Worth, TX, USA: Leyline Publishing.

Baker, Ian S., Ian J. Turner, and Yasuhiro Kotera. 2022. "Role-play Games (RPGs) for Mental Health (Why Not?): Roll for Initiative." International Journal of Mental Health and Addiction 11: 1-9.

Ball, Graham. 2022. "A Phenomenological Inquiry into the Therapeutic Aspects of Tabletop Roleplaying Games." Ph.D. diss, UWE Bristol, October 6.

Bartenstein, Lennart. 2022a. "Larp in Cognitive Behavioral Psychotherapy (CBT)." Video poster presented at the Transformative Play Initiative Seminar 2022: Role-playing, Culture, and Heritage, October 20-21, 2022. Transformative Play Initiative. YouTube, October 20.

———. 2022b. "Larp in Cognitive Behavioral Therapy: Making Larp a Standard Method." Nordiclarp. org, April 22.

Bean, Anthony, Emory S. Daniel Jr., Sarah A. Hays, eds. 2020. *Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy*. Leyline Publishing, 2020.

Beltrán, Whitney "Strix." 2012. "Yearning for the Hero Within: Live Action Role-Playing as Engagement with Mythical Archetypes." In *Wyrd Con Companion Book 2012*, edited by Sarah Lynne Bowman and Aaron Vanek, 89-96. Los Angeles, CA: Wyrd Con, 2012.

———. 2013. "Shadow Work: A Jungian Perspective on the Underside of Live Action Role-Play in the United States." In *Wyrd Con Companion Book 2013*, edited by Sarah Lynne Bowman and Aaron Vanek, 94-101. Los Angeles, CA: Wyrd Con.

Berger, Roni. 2015. "Now I See It, Now I Don't: Researcher's Position and Reflexivity in Qualitative Research." *Qualitative Research* 15, no. 2: 219–34. doi:10.1177/1468794112468475.

Blatner, Adam. 2000. *Foundations of Psychodrama: History, Theory, and Practice*. New York, NY: Springer.

Bowditch, Lorelle, Anjum Naweed, Tania Signal, and Janine Chapman. 2024. "More than Just a Game: Understanding How Internet Games Are Used in Times of Stress." *Entertainment Computing* 49 (March): 100617. https://doi.org/10.1016/j.entcom.2023.100617.

Bowman, Sarah Lynne. 2010. *The Functions of Role-playing Games: How Participants Create Community, Solve Problems, and Explore Identity.* Jefferson, NC: McFarland and Company, Inc.

———. 2013. "Social Conflict in Role-Playing Communities: An Exploratory Qualitative Study." *International Journal of Role-Playing* 4, no. 4. doi:10.33063/ijrp.vi4.183.

Bowman, Sarah Lynne, and Andreas Lieberoth. 2024. "Psychology and Role-playing Games." In *The Routledge Handbook of Role-playing Game Studies,* edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Bowman, Sarah Lynne, and Kjell Hedgard Hugaas. 2021. "Magic is Real: How Role-playing Can Transform Our Identities, Our Communities, and Our Lives." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 52-74. Oslo, Norway: Knutepunkt.

Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3, no. 2: 77–101. doi:10.1191/1478088706qp063oa.

Brown, Kimberly. 2018. "Slaying Dragons: The Therapeutic Value of Tabletop Gaming." Master's Thesis, City University of Seattle, Vancouver BC, Canada.

Bryan-Kinns, Nick, and Fraser Hamilton. 2012. "Identifying Mutual Engagement." *Behaviour and Information Technology* 31, no. 2: 101–25. doi:10.1080/01449290903377103.

Burenkova, Olga Mikhailovna, Irina Vladimirovna Arkhipova, Sergei Aleksandrovich Semenov, and Saniya Zakirzyanovna Samarenkina. 2015. "Motivation within Role-Playing as a Means to Intensify College Students' Educational Activity." *International Education Studies* 8, no. 6. doi:10.5539/ies.v8n6p211.

Causo, Francesco, and Elly Quinlan. 2021. "Defeating Dragons and Demons: Consumers' Perspectives on Mental Health Recovery in Role-playing games." *Australian Psychologist* 56, no. 3: 256–267.

Chen, Chi-Ying, and Shao-Liang Chang. 2019. "Moderating Effects of Information-Oriented versus Escapism-Oriented Motivations on the Relationship between Psychological Well-Being and Problematic Use of Video Game Live-Streaming Services." *Journal of Behavioural Addictions* 8, no. 3: 564–73. https://doi.org/10.1556/2006.8.2019.34.

Chen, Chih-Hung, and Jia-Yu Syu. 2024. "Effects of Integrating a Role-playing Game into a Virtual Reality-based Learning Approach on Students' Perceptions of Immersion, Self-efficacy, Learning Motivation and Achievements." *British Journal of Educational Technology*, January. https://doi.org/10.1111/bjet.13436.

Chung, Tsui-Shan. 2013. "Table-top Role-playing Game and Creativity." *Thinking Skills and Creativity* 8: 56-71.

Csikszentmihalyi, Mihaly. 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper/Collins.

Coe, Darrin. 2017. "Why People Play Table-Top Role-playing games: A Grounded Theory of Becoming as Motivation." *The Qualitative Report* 11. doi:10.46743/2160-3715/2017.3071.

Cogburn, Jon, and Mark Silcox. 2012. *Dungeons & Dragons and Philosophy Raiding the Temple of Wisdom*. Chicago: Open Court.

Connell, Megan. 2023. *Tabletop Role-Playing Therapy: A Guide for the Clinician Game Master.* W. W. Norton and Company.

Connell, Megan, Elizabeth D. Kilmer, and Jared N. Kilmer. 2020. "5: Tabletop Role Playing Games in Therapy." In *Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy,* edited by Anthony M. Bean, Emory S. Daniel Jr., Sarah A. Hays, 75-94. Fort Worth, TX, USA: Leyline Publishing.

Currie, Donald. 2005. *Developing and Applying Study Skills: Writing Assignments, Dissertations and Management Reports*. London: Chartered Institute of Personnel and Development.

Daniau, Stéphane. 2016. "The Transformative Potential of Role-playing Games: From Play Skills to Human Skills." *Simulation and Gaming* 47, no. 4: 423–444.

Davis, Adam, and Adam Johns. 2020. "Dungeons, Dragons, and Social Development." In *Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy*, edited by Anthony M. Bean, Emory S. Daniel Jr., Sarah A. Hays, 95-107. Fort Worth, TX, USA: Leyline Publishing.

Deckers, Lambert. 2010. *Motivation: Biological, Psychological, and Environmental*. Boston, MA: Allyn and Bacon.

Deterding, Sebastian. 2017. "Alibis for Adult Play: A Goffmanian Account of Escaping Embarrassment in Adult Play." *Games and Culture* 13, no. 3: 260–279.

Diener, Ed, and Martin E.P. Seligman. 2002. "Very Happy People." *Psychological Science* 13, no. 1: 81–84. doi:10.1111/1467-9280.00415.

Dodgson, Joan, E. 2019. "Reflexivity in Qualitative Research." *Journal of Human Lactation* 35 (2): 220–22. doi:10.1177/0890334419830990.

Dolgobrodova, Katya. 2015. *Exploring the Positive Psychological Aspects of Video-Gaming: A Thematic Analysis of Semi-Structured Interviews*. Manchester Metropolitan University.

Duchatelet, Dorothy, Pieter Spooren, Peter Bursens, David Gijbels, and Vincent Donche. 2021. "Explaining Self-Efficacy Development in an Authentic Higher Education Learning Context of Role-Play Simulations." *Studies in Educational Evaluation* 68 (March): 100940. https://doi.org/10.1016/j.stueduc.2020.100940.

Dyson, Scott Benjamin, Yu-Lin Chang, Hsueh-Chih Chen, Hsiang-Yu Hsiung, Chien-Chih Tseng, and Jen-Ho Chang. 2016. "The Effect of Tabletop Role-playing games on the Creative Potential and Emotional Creativity of Taiwanese College Students." *Thinking Skills and Creativity* 19: 88–96. doi:10.1016/j.tsc.2015.10.004.

Eklund, Lina. 2015. *Sociality of Gaming*. Stockholm: US-AB.

Enfield, George. 2007. "Becoming the Hero: The Use of Role-playing games in Psychotherapy." In *Using Superheroes in Counselling and Play Therapy*, edited by Lawrence Rubin, 227–41. Springer Publishing Co.

Erikson, Erik. 1968. *Identity: Youth and Crisis*. New York, NY: W.W. Norton and Co.

Fine, Gary Alan. 1983. *Shared Fantasy:* Role-playing game*s as Social Worlds*. Chicago: University of Chicago Press.

Flick, Uwe. 2009. *An Introduction to Qualitative Research*. London: SAGE.

Gay, Amy, Kelsey George, Vera Gubnitskaia, and Carol Smallwood. 2009. "Verbal Data: An Overview." In *An Introduction to Qualitative Research.* 211-19. London: SAGE.

Giacomini, Mita. 2010. "Theory Matters in Qualitative Health Research." In *The Sage Handbook of Qualitative Methods in Health Research*, edited by Ivy Bourgeault, Robert Dingwall, and Ray de Vries. Sage.

Gutierrez, Raul. 2017. "Therapy and Dragons: A Look into the Possible Applications of the Possible Applications of Tabletop Role Playing Games in Therapy with Adolescents." *Electronic Theses, Projects, and Dissertations* 527: 1-39. https://scholarworks.lib.csusb.edu/etd/527

Hamamci, Zeynep. 2006. "Integrating Psychodrama and Cognitive Behavioral Therapy to Treat Moderate Depression." *The Arts in Psychotherapy* 33, no. 3: 199–207. https://doi.org/10.1016/j.aip.2006.02.001.

Heintzelman, Samantha J., and Laura A. King. 2018. "Routines and Meaning in Life." *Personality and Social Psychology Bulletin* 45, no. 5: 688–99. doi:10.1177/0146167218795133.

Helbig, Kate. A. 2019. "Evaluation of a Role-playing game to Improve Social Skills for Individuals with ASD." Ph.D. Diss., University of Southern Mississippi, USA.

Henrich, Sören, and Rachel Worthington. 2021. "Let Your Clients Fight Dragons: A Rapid Evidence Assessment Regarding the Therapeutic Utility of '*Dungeons & Dragons*'." *Journal of Creativity in Mental Health*: 1-19. https://doi.org/10.1080/15401383.2021.1987367

Hendriks, Martijn, Kai Ludwigs, and Ruut Veenhoven. 2014. "Why Are Locals Happier than Internal Migrants? The Role of Daily Life." *Social Indicators Research* 125 (2): 481–508. doi:10.1007/s11205-014-0856-7.

Karatay, Gülnaz, and Nazan Gürarslan Baş. 2017. "Effects of Role-Playing Scenarios on the Self-Efficacy of Students in Resisting against Substance Addiction: A Pilot Study." *INQUIRY: The Journal of Health Care Organization, Provision, and Financing* 54 (January): 004695801772062. https://doi.org/10.1177/0046958017720624.

Karwowski, Maciej, and Marcin Soszynski. 2008. "How to Develop Creative Imagination? Assumptions, Aims and Effectiveness of Role Play Training in Creativity (RPTC)." *Thinking Skills and Creativity* 3, 163–171.

Katō, Kōhei. 2019. "Employing Tabletop Role-playing games (TRPGs) in Social Communication Support Measures for Children and Youth with Autism Spectrum Disorder (ASD) in Japan: A Hands-On Report on the Use of Leisure Activities." *Japanese Journal of Analog Role-playing Game Studies* 0: 23-28.

Kessock, Shoshana. 2013. "Ethical Content Management and the Gaming Social Contract." In *Wyrd Con Companion Book 2013,* edited by Aaron Vanek and Sarah Lynne Bowman, 94–101. Los Angeles: WyrdCon.

Kilmer, Elizabeth D., Adam D. Davis, Jared N. Kilmer, and Adam R. Johns. 2023. *Therapeutically Applied Role-playing Games: The Game to Grow Method.* Routledge.

Kowert, Rachel, and Julian A. Oldmeadow. 2013. "(A)Social Reputation: Exploring the Relationship between Online Video Game Involvement and Social Competence." *Computers in Human Behavior* 29, 4: 1872–78. doi: 10.1016/j.chb.2013.03.003.

Kuo, Andrew, Richard J. Lutz, and Jacob L. Hiler. 2016. "Brave New World of Warcraft: A Conceptual Framework for Active Escapism." *Journal of Consumer Marketing* 33, no. 7: 498–506. doi:10.1108/jcm-04-2016-1775.

Lehto, Kerttu. 2021. "Role-playing Games and Well-Being." *International Journal of Role-Playing* 11: 72-93.

Lloyd, Joanne, Sally Frost, and Claire Jones. 2019. "Locus of Control and Involvement in Videogaming." *New Media & Society* 21, no. 7: 1613-1635. https://doi.org/10.1177/1461444819828308

Luo, Yangmei, Xuhai Chen, Senqing Qi, Xuqun You, and Xiting Huang. 2018. "Well-Being and Anticipation for Future Positive Events: Evidences from an Fmri Study." *Frontiers in Psychology* 8 (January). https://doi.org/10.3389/fpsyg.2017.02199.

Mann, M. 2004. "Self-Esteem in a Broad-Spectrum Approach for Mental Health Promotion." *Health Education Research* 19, no. 4: 357–72. doi:10.1093/her/cyg041.

Markham, Annette. 1998. *Life Online: Researching Real Experience in Virtual Space.* Oxford: AltaMira Press.

Marriott, Brigid R., Evelyn Cho, Siena K. Tugendrajch, Matthew D. Kliethermes, J. Curtis McMillen, Enola K. Proctor, and Kristin M. Hawley. 2021. "Role-Play Assessment of Therapist Adherence and Skill in Implementation of Trauma-Focused Cognitive-Behavioural Therapy." *Administration and Policy in Mental Health and Mental Health Services Research* 49, no. 3: 374–84. https://doi.org/10.1007/s10488-021-01169-9.

Melodia, Fiordalisa, Natale Canale, and Mark D. Griffiths. 2020. "The Role of Avoidance Coping and Escape Motives in Problematic Online Gaming: A Systematic Literature Review." *International Journal of Mental Health and Addiction* 20, no. 2: 996–1022. https://doi.org/10.1007/s11469-020-00422-w.

Monfort, Samuel S., Hannah E. Stroup, and Christian E. Waugh. 2015. "The Impact of Anticipating Positive Events on Responses to Stress." *Journal of Experimental Social Psychology* 58 (May): 11–22. https://doi.org/10.1016/j.jesp.2014.12.003.

Montola, Markus. 2010. "The Positive Negative Experience in Extreme Role-Playing." In *Proceedings of DiGRA Nordic 2010: Experiencing Games: Games, Play, and Players:* 1–8. Tampere.

Montola, Markus, and Jussi Holopainen. 2012. "First Person Audience and Painful Role- Playing." In *Immersive Gameplay Essays on Participatory Media and Role-Playing*, edited by Evan Torner, and William White, 13–30. Jefferson, NC.

May, S. A. 1994. "The Best in Role-playing Games." *Compute!* 16, no. 1 (1994): 10-11.

Mendoza, Jonathan. 2020. "Gaming Intentionally: A Literature Review of the Viability of Role-playing Games as Drama-therapy-informed Interventions." Master's Thesis, Lesley University.

Meriläinen, Mikko. 2012. "The Self-perceived Effects of the Role-playing Hobby on Personal Development – A Survey Report." *International Journal of Role-Playing* 3: 49-68.

Montola, Markus, Jaakko Stenros, and Eleanor Saitta, 2015. "The Art of Steering: Bringing the Player and the Character Back Together." In *The Knudepunkt 2015 Companion Book,* edited by Charles Bo Nilsen, and Claus Raasted, 106–17. Copenhagen.

O'Donnell, Shane, and Noel Richardson. 2018. *Middle-Aged Men and Suicide in Ireland.* The Men's Health Forum in Ireland.

Oliffe, John L., Alex Broom, Michaela Popa, Emily K. Jenkins, Simon M. Rice, Olivier Ferlatte, and Emma Rossnagel. 2018. "Unpacking Social Isolation in Men's Suicidality." *Qualitative Health Research* 29, no. 3: 315–27. doi:10.1177/1049732318800003.

Player, Michael J., Judy Proudfoot, Andrea Fogarty, Erin Whittle, Michael Spurrier, Fiona Shand, Helen Christensen, Dusan Hadzi-Pavlovic, and Kay Wilhelm. 2015. "What Interrupts Suicide Attempts in Men: A Qualitative Study." *PLOS ONE* 10, no. 6. doi:10.1371/journal.pone.0128180.

Poeller, Susanne, Martin Dechant, and Regan L. Mandryk. 2023. "Playing a Flawless Character? Exploring Differences Between Experts and Novices in Tabletop Role-playing games and Potential Benefits for Well-Being." In Proceedings of the *18th International Conference on the Foundations of Digital Games (FDG '23).* Association for Computing Machinery, New York, NY, USA, Article 58, 1–7. https://doi.org/10.1145/3582437.3587180

Pohjola, Mike. 2015. "Steering for Immersion in Five Nordic Larps: A New Understanding of Eläytyminen." In *The Knudepunkt 2015 Companion Book*, edited by Charles Bo Nielsen, and Claus Raasted, 10–117. Copenhagen, Denmark: Rollespilsakademiet.

Polkinghorne, Adric, Jane Turner, Manuela Taboada, and Jeremy Kerr. 2020. "DiGRA'21–Proceedings of the 2021 DiGRA International Conference: Play Everywhere." In *Digital Games Research Association*. Australia.

Press, Nancy. 2005. "Qualitative Research: Thoughts on How to Do It; How to Judge It; When to Use It." *Genetics in Medicine* 7, no. 3: 155–58. doi:10.1097/00125817-200503000-00001.

Rajkumar, Ravi Philip. 2020. "Covid-19 and Mental Health: A Review of the Existing Literature." *Asian Journal of Psychiatry* 52: 102066. doi:10.1016/j.ajp.2020.102066.

Reeve, Johnmarshall. 2005. *Understanding Motivation and Emotion.* 4th ed. Danvers, MA: John Wiley and Sons.

Reynolds, Sean, and Shanna Germain. 2019. *Consent in Gaming*. Monte Cook Games.

Rivers, Anissa, Ian E. Wickramasekera, Ronald J. Pekala, and Jennifer A. Rivers. 2015. "Empathic Features and Absorption in Fantasy Role-Playing." *American Journal of Clinical Hypnosis* 58, no. 3: 286–94. doi:10.1080/00029157.2015.1103696.

Rosselet, Julien G., and Sarah D. Stauffer. 2013. "Using Group Role-playing games with Gifted Children and Adolescents: A Psychosocial Intervention Model*." International Journal of Play Therapy* 22, no. 4 (December 1).

Runco, Mark, and Carol Dweck. 2007. "Motivation, Competence, and Creativity." In *Handbook of Competence and Motivation,* edited by Andrew Elliot, 609–23. New York, NY: The Guilford Press.

Sargent, Michael S. 2014. "Exploring Mental Dungeons and Slaying Psychic Dragons: An Exploratory Study." Master's Thesis, Smith College.

Scudder, Sasha. 2018. "Reflections: The Positive Effects of Cooperative Roleplaying Games on Anxiety Disorders." Bachelor's thesis, Scripps College, Claremont, Califórnia.

Sias, Patricia, and Heidi Bartoo. 2007. "Friendship, Social Support, and Health." In *Low-Cost Approaches to Promote Physical and Mental Health*, edited by Luciano L'Abate. New York, NY: Springer.

Spinelli, Lily. 2018. "Tabletop Role-playing games and Social Skills in Young Adults." Thesis, DigitalCommons@Pace. Pace University.

Stavropoulos, John. 2013. *X-Card: Safety Tools for Simulations, Role-Playing, and Games.* Google Docs.

Stuckey, Heather L., and Jeremy Nobel. 2010. "The Connection between Art, Healing, and Public Health: A Review of Current Literature." *American Journal of Public Health* 100, no. 2: 254–63. doi:10.2105/ajph.2008.156497.

Taylor, Shelley E., Laura Cousino Klein, Brian P. Lewis, Tara L. Gruenewald, Regan A. Gurung, and John A. Updegraff. 2000. "Biobehavioral Responses to Stress in Women: Tend-and-Befriend, Not Fight-or-Flight." *Psychological Review* 107, no. 3: 411–29. doi:10.1037/0033-295x.107.3.411.

Van Boven, Leaf, and Laurence Ashworth. 2007. "Looking Forward, Looking Back: Anticipation Is More Evocative than Retrospection." *Journal of Experimental Psychology: General* 136, no. 2: 289–300. doi:10.1037/0096-3445.136.2.289.

Varrette, Matthew, Jack Berkenstock, Adams Greenwood-Ericksen, Anthony Ortega, Faith Michaels, Veronica Pietrobon, and Marc Schodorf. 2023. "Exploring the Efficacy of Cognitive Behavioural Therapy and Role-playing games as an Intervention for Adults with Social Anxiety." *Social Work with Groups* 46, no. 2: 140-165.

White, Catriona. 2017. "*Dungeons & Dragons* Is Now Being Used as Therapy." *BBC Three*. BBC. May 8. https://www.bbc.co.uk/bbcthree/article/ab3db202-341f-4dd4-a5e7-f455d924ce22.

Williams, Patrick, David Kirschner, Nicolas Mizer, and Sebastian Deterding. 2018. "Sociology and Role-playing games." In Role-playing game *Studies, A Transmedia Approach,* edited by José P. Zagal and Sebastian Deterding, 227–44. Routledge.

Willig, Carla. 2013. *Introducing Qualitative Research in Psychology*. Berkshire: McGraw-Hill Education.

Wilson, David Louis. 2007. "An Exploratory Study on the Players of Dungeons & Dragons." Ph.d. diss., Institute of Transpersonal Psychology. Palo Alto, CA.

Wimmer, Jeffrey, and Sonja Kröger. 2013. 'There Is No Place like Home': The Potential of Commercial Online Gaming Platforms to Become Third Places." In *Multiplayer: The Social Aspects of Digital Gaming,* edited by Thorsten Quandt, 111–23. London: Routledge.

World Health Organization. 2022. "Mental Health." World Health Organization. World Health Organization. 2022.

Yee, Nick. 2006. "Motivations for Play in Online Games." *CyberPsychology and Behaviour* 9, no. 6: 772–75. https://doi.org/10.1089/cpb.2006.9.772.

Zagal, José P., and Sebastian Deterding, eds. 2024. *The Routledge Handbook of Role-playing Game Studies*. London: Routledge.

Zayts-Spence, Olga, David Edmonds, and Zoe Fortune. 2023. "Mental Health, Discourse and Stigma." *BMC Psychology* 11, no. 1. https://doi.org/10.1186/s40359-023-01210-6.

Zayas, Luis H, and Bradford H. Lewis. 1986. "Fantasy Role-Playing for Mutual Aid in Children's Groups." *Social Work with Groups* 9, no. 1: 53–66. doi:10.1300/j009v09n01_05.

APPENDIX I

Baseline questions:

- How are you/ how has your day been?
- Thanks so much for taking part in my study. What interested you in reaching out to me?
- Do you prefer keeping our cameras on or off?

Questions:

- When did you first discover RPGs? / How long have you been playing?
- What was your first experience of playing like?
- What type of character do you play and what was your inspiration for your them?
- How are you similar/ dissimilar character?
- How do you feel before/after playing D&D?
- How do you feel when you take on the role of your character? What's that process like?
- What relationship do you have with the people you play with?
- Have you created any relationships from playing?
- Has it benefitted you/ hindered you?
- In what ways has D&D impacted on your life?
- Would you encourage others to try it and why?
- Do you have a moment in-game that highlights why you like playing?

Added questions for the DMs:

- Do you prefer playing or DMing?
- As a DM, what's it running the experience for the players?
- Is there a sense of responsibility with being a DM?
- Does what is going on in your everyday life ever impact what's going on in the story you create?
- Have you had any standout moments as a DM that highlight why you enjoy sitting at this side of the screen?

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"It Might Have a Little to Do with Wish Fulfillment": The Life-Giving Force of Queer Performance in TTRPG Spaces

Abstract: In *Cruel Optimism*, Lauren Berlant asserts that "fantasy [can serve] as a life-sustaining defense against the attritions of ordinary violent history," which is a statement that holds true for many queer role-players in TTRPG spaces (Berlant 2012, 45). Around the table, these worlds enable players to discover and render their identities legible in social utopian spaces and rehearse their performance for life outside of them. Through engaging with scholarship, autoethnographic writing, and cultural production surrounding TTRPGs, queer identity, avatars, and gender performance, this project asserts that TTRPGs function as safe spaces for becoming, due in part to the ability to create an avatar, or "flexible representational stand-in" for the self, that is queer and embodied through role-play (McMillan, 2015 13). This is achieved through tracking the author's experience of discovering and forming their queer and trans identity through role-playing various characters and disciplining their function through related interdisciplinary theory across queer, feminist, and role-playing studies. Additionally, through utilizing additional ethnographic accounts and analyzing TTRPG-based media in theatre and actual play spaces, this project further establishes how the emancipatory potential in escapist TTRPG fantasy spaces can ultimately alter queer role-players' engagement with material reality in a world adversarial to their existence and visibility, especially in light of the past few years.

Keywords: tabletop role-playing games, queer community, theatre, identity, trans, gender performance

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1. INTRODUCTION

During the COVID-19 pandemic, when I had to move from my apartment at university back to my hometown with my homo-and-transphobic family, tabletop role-playing games (TTRPGs) became the only way to express my queer identity in the seclusion of my room and on Discord calls with friends from university or those I met on the Internet. For a few hours a week —if scheduling permitted— I could be called he/they pronouns as a litmus test via my characters to see if I wanted to try them on in real life, before going downstairs to hear my father spew transphobic rhetoric about my friends over dinner. There, under the guise of a character trying to become fully machine via body modifications, I could express and live out the desires for medicalized transition that drive my mother into hysteria whenever the word "testosterone" is mentioned. Each time I got on a Discord call, I projected the self into campaigns set in fictional worlds—be it *Dragon Age, Magic: The Gathering,* or *League of Legends*— where "fantasy [served] as a life-sustaining defense against the attritions of ordinary violent history" (Berlant 2012, 45). In accordance with Lauren Berlant's *Cruel Optimism* and other research, for better or worse, it appeared my experience with escapist, fantastical role-play was not unique in the slightest. Due in part to the ability to create an avatar —which black feminist scholar Uri McMillan asserts as a "flexible representational stand-in" for the self— that is queer and embodied through role-play, TTRPG spaces have become places for queer individuals to come to terms with, explore, or discover non-cisheteronormative identities through escapist fantasy that ultimately alters one's engagement with material reality in a world adversarial to their existence and visibility (McMillan 2015, 13).[1]

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1   For purposes of this paper, this specific McMillan's concept of "avatar" will be referred to as a "character" when not engaging explicitly with scholars and theorists, as the usage of the term in game studies' history is appropriate of Hindu and Buddhist religious and cultural contexts. For more

Through engaging with scholarship and cultural production surrounding TTRPGs, queer identity, avatar, gender performance, and writing autoethnography, this project highlights TTRPGs' unique function as a "life-sustaining defense" and life-giving force for members of the queer community because it enables people to discover and render their identities legible in social utopian spaces at the table and rehearse their performance for life outside of them (Berlant 2012, 45).

2. BACKGROUND, POSITIONALITY, AND THEORY

As a gay and transmasculine individual from a white middle-class background, my experience with embodying and creating queer characters is by no means universal, as even within my campaigns, what I interrogate via role-play as a pre-medicalized transition and not-fully-out individual is radically different from my friend's as an out and medically transitioning transwoman. However, as asserted by Jack Halberstam, the "figure of transgender embodiment is central to numerous emergent narratives of self and other, [and the] being and becoming" that my embodiment enacts —through the mediation of characters— and falls within lineages of it generating "new narratives of selfhood" (Halberstam 2018, 30). As such, coming to terms with transgender identity will be privileged via autoethnography in this piece. This is not to say that sexuality is not important, but the mutation over time of trans identity is the most in line with my experience, embodies theories of character and avatar most explicitly, and attempts to reassert why and how "the 'T' might in fact be the more fundamental letter" in the LGBT+ acronym that tends to subsume trans presence, importance, and radicality in queer discourse, despite the fact that trans and queerphobia is typically about how people perceive gender nonconformance and transgression (Bey 2021, 4, 13). The prioritizing of the "T" is not only an intervening action, but also is key when thinking about how performance and performativity are constructed, especially in regard to gender.

In their seminal work *Gender Trouble,* Judith Butler notes how "gender is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, of a natural sort of being" (Butler 1999, 43-44). This congealing and repeated stylization in TTRPG spaces happens from session to session via role-play performances that construct gender for both the character and their originator in ways that can facilitate self-understanding. Highlighting how queer characters shifted in meaning and intention for me in coming to know myself is illustrative of its function as a vehicle for self-expression and knowledge. To provide a fuller picture of the phenomena, experiences from other ethnographic accounts of queer characters in TTRPGs will also be incorporated into the conversation.

My experience with queer characters is one of always incomplete being and becoming, but without those characters, I do not know if I would know myself the way I do now. As a child, I was the strange kid who didn't put their name in video games; part of it was because of a childish *Matrix*-like notion that if I died in the game I would die in real life, but part of me never connected with the female I saw on screen and picked the most generic white girl names like Stacy or Laura to distance myself from those pixels who couldn't be me. It was like that up until I first started playing *D&D* in college. Then, I knew I was some form of trans, but was stuck in a relationship and environment that was read as cisheteronormative, and I played the feminine characters I thought I had to. Some years-and-a-half later, I played a one-shot of *Cyberpunk 2022* with some college friends in April 2020. It was my first time playing a TTRPG in some time and I had, at this point, been quarantined at my childhood home for a little over a month. In the face of my declining mental health, one of my genderfluid friends who, at the time, was only presenting as masculine, put on feminine airs in voice and character choice for the game.

info see: de Wildt, Lars, et al. "(Re-)Orienting the Video Game Avatar."

I don't know why, but something clicked that I was allowed to do that too—that I could unabashedly play with and across gender around the table like that— so I did.

The timespan I have spent playing *D&D*, somewhat ironically, lines up with the recent boom in TTRPG scholarship in the past few years, in large part due to the cultural capital they've obtained from *Stranger Things*, and actual play podcasts like *Critical Role* and *The Adventure Zone.* With a wider emergence into mainstream pop culture spaces, role-playing games have become a more active sphere of academic discourse and have expanded their reach in game studies, performance studies, on occasion queer theory and analysis, and subsequently a number of edited collections like *Watch Us Roll: Essays on Actual Play and Performance in Tabletop Role-Playing Games* (2021) have been released. This being said, there are several seminal texts in sociology like Gary Alan Fine's *Shared Fantasy: Role-Playing Games as Social Worlds* (1983), game studies like Daniel Mackay's *The Fantasy Role Playing Game: A New Performing Art* (2001) and several works by Sarah Lynne Bowman, including *Functions of Role-Playing Games: How Participants Create Community, Solve Problems, and Explore Identity* (2010), that have laid the foundations for young scholars' Master's theses that examine TTRPGs and identity construction through close readings of content, ethnography, and theory (see e.g., Rogers 2020; Shepherd 2021; Bosstick 2021).

Avatar is a concept that, while central in video game studies, does not appear in as much TTRPG scholarship; however, is has also been thoroughly interrogated, especially in terms of race politics by scholars of and about the internet, like Lisa Nakamura, and within performance studies by scholars like Uri McMillan. As a lot of role-playing game scholarship is centered in digital spaces and MMORPG spheres like *World of Warcraft* and other video games, the most overlap of avatar discussions are found within this role-playing game subsection through works of scholars like Jamie Banks. For example, in her seminal essay "Race In/For Cyberspace," Nakamura highlights the "unprecedented possibilities … for [people to] contro[l] the conditions of their own self-representations in ways impossible in face to face interaction" on the Internet which is enabled by the "ability to physically 'set' one's gender, race, and physical appearance … [and subsequent] require[ment] to project a version of the self which is inherently theatrical" online (Nakamura 2001, 660, 662).

As such, online avatars can be complicit in both appropriative or liberatory practices, depending on the user. On the one hand, avatars may be utilized in identity tourism, a practice where, typically white people, create online avatars of races and genders not their own and effectively "reduc[e] non-white identity positions to part of a costume or masquerade to be used by curious vacationers in cyberspace" as a form of appropriation (Nakamura 2001, 666). On the other hand, utilizing avatars can "publiciz[e] bodies and lives previously unrepresented by the [people] living them" in a reparative practice taken up by typically invisible groups, like pregnant women, online to build community and have increased visible representation for it (Nakamura 2008, 170). Jamie Banks' work examines similar concepts of avatar, like Nakamura, in her study of MMORPG spaces where four types of relationships between in-game avatars and their player characters —avatar-as-object, avatar-as-me, avatar-as-symbiote, and avatar-as-other— are theorized (Banks 2015). As such, Banks examines how a relationship may develop between player and avatar, largely based on a player's motivations and agenda, personally and creatively, whether that means using the avatar as a tool to win the game, to serve as a digital doppelgänger to navigate within, as a collaborator in self-making, or as a social agent independent of the self in-world (Banks 2015). Similar to the idea of an avatar-as-symbiote in digital spaces to make the self, in performance studies spaces, McMillan asserts that avatars enable black "women [to] engage in spectacular, shocking, and even unlawful role-play," "highligh[t] (and stretc[h]) the subordinate roles available to black women," and "transubstantiate themselves into porous beings with the capacity to mutate across time" (McMillan 2015, 12, 14). Thus, the avatar serves as a second-self and a site of personal recalibration that can imbue

liberatory and revolutionary power in black feminist performance and performativity where they can inscribe their own endings, meanings, and places in history and culture.

3. CULTIVATING QUEER CHARACTERS AND SEVERAL SELVES

Creating a queer avatar, or character in TTRPGs, looks different for everyone and these variances are categorized by Sarah Lynne Bowman in her seminal work, *Functions of Role-Playing Games: How Participants Create Community, Solve Problems, and Explore Identity* (2010), into the 'Nine Types of Player-Characters' that players used to navigate identity, rules, relationships, and social worlds, which ethnography projects and other scholarly endeavors have further substantiated (Bowman 2010, 164-176). For example, in Nathaniel Rogers' ethnographic study or queer women playing *D&D*, he points to how some players create characters that "have parallels to [themselves] … [which] makes them relatable" and "create[s] a sense of affinity and verisimilitude" between player and character, which mirror Bowman's Doppelgänger Self (Rogers 2020, 33). Some of Rogers' other interlocutors enact Augmented or Devoid versions of the Doppelgänger self-insert, where the player "forwards or withdraws elements of their [real world] personality or identity to highlight a different facet of self" in-game as part of their process (Rogers 2020, 36).

Other scholars point to how players may "experiment by adopting personas different from themselves [which may be] ones that they perhaps have coveted or even feared in life" which serves as Bowman's Idealized or Experimental Selves that can simulate embodied becoming or are means to just play around with (Tynes 2010, 225). My first real queer character in a TTRPG space was an example of Bowman's Fragmented Self, which arose out of a "psychological [and] spiritual need inherent … at the moment of creation" (Bowman 2010,167-170) to accentuate and explore my repressed queer identity and took the form of a closeted gay mage named Lucius who was operating within a homebrew *Dragon Age* setting for *D&D* 5E. While there was not much narrative time and space for him to be gay —in terms of his sexuality— so much of his driving angst, unintentionally and subconsciously, ended up being about queer temporality. Not all of it was my choice of course, as halfway through the campaign, he contracted a degenerative disease known as the "taint" from the blood and fluids of an enemy known as the darkspawn. While Lucius underwent a ritual to stave off the effects, the corruption is latent in his degenerating body until he becomes one of them, effectively killing him in the end. While the "taint" is by no means an exact fantasy HIV/AIDS analog, the shifted temporality of queer life as a result of degenerative illness became a focal point of the character and his fears about legacies and lineage.

Nakamura's work and McMillan's theorization of the avatar speak to their power as "mediums— between the spiritual and earthly as well as the abstract and the real—and the uses of those mediums, as well as their attendant meanings, continue to morph" and have real-world impacts when they're continuously enacted in cultural production (McMillan 2015, 11). The fluidity of avatars and what they have to do and say about the self is what makes them integral to discussions of queer performance in TTRPG spaces and ties them to other works of queer theory. For me, in a horribly Focauldian way, Lucius's anxieties about filial obligations to the lineage and the similar ones of another one of my queer characters —an aristocratic double-agent and flamboyantly gay heir apparent Dmitri— became vehicles to explore my own. Coming from a middle-class, conservative, Italian American family, they, like the bourgeoisie of the Victorian era, have "staked [our family's] life and its death on sex by making it responsible for its future welfare" (Foucault 1978, 124).

From a young age, I cannot count the reminders and expectations levied by my parents, grandparents, and extended family, that my siblings and I need to find good —and of course, preferably Italian or Mediterranean-blooded— cisheteronormative marriages that bear children. As someone who

doesn't want biological children and is gay, I've never quite fit that mold, but would still nod and smile at holidays whenever it emerged as conversations. However, I hadn't fully gripped how much it was impacting my psyche until gay anxiety over progeny became less of a character trait and more of a pattern across all my characters, and role-play gave me the space to enact multiple futures. While these fears aren't ones I discuss with my friends, TTRPGs gave me the place to explore them, under the guises of a game, regardless or not if I was fully aware at the time. Lucius would eventually be trapped in a lavender marriage of his own doing, establishing a progeny, but dying soon after with unrequited love for his best friend unexpressed. Having just killed his twin sister Calpernia for being a cultist in the in-universe equivalent of a neo-Nazism and being the only son with magical potential in a society where class is predicated on magical bloodlines, he was a character who was doomed by the narrative: the personal worst-case scenario. Writing for him, after this decision, became so fully charged with pain that at one point other members of my party had checked on me outside of the game: it was too raw, too visceral.

Having experienced an online stalker from that group, I eventually had to leave the campaign, but it probably did me some good in not consistently putting me in the mental space I feared. It also pushed me to leave more room for hope in my character Dmitri's future, despite another lavender marriage looming overhead, which served almost as a silent prayer that the campaign circumstances would help him circumvent Lucius's fate. Still, continuously forcing me to mentally interrogate questions of queer temporality and progeny, and feeling and witnessing the affect that these imagined futures had on my body as well as my mental and emotional state, helped me realize that I cannot live through these dystopian situations I've forced my characters into. So while Dmitri's campaign ended abruptly due to a breakup, the lack of closure is of some comfort to me, in that he might be able to break out of this cycle and in so doing, I may be able to as well.

Parting with one's gender assigned at birth is never easy, especially when you've been socialized as said gender for over two decades, and what comes with it is a lot of recalibration. Having attended an all-girls Catholic middle and high school, which perpetuated misandry all the while preaching girl and God's power, the idea of being transmasculine was not easy to accept. This is especially the case when increasingly present trans-exclusionary self-proclaimed "feminist" rhetoric paints trans men as individuals who have given into the "allure of escaping womanhood" induced by sympathetic people who "persuad[e you] … to turn [your]self into [a] son" and join the enemy (Rowling 2020).

So for me, playing queer cis men in TTRPG spaces helped me realize that masculinity is not something inherently damaging or oppressive; it is instead something radical and liberatory that I can design for myself. Having not grown up under society's expectations of manhood, I am still allowed to claim masculinity as my own and embody it in an emancipatory way that can both embrace its joys and work against its patriarchal associations for the betterment of myself and my community. Once I accepted masculinity through characters like Dmitri and Lucius, when new campaigns came about I could then feel safe exploring being transmasculine —which was infinitely more scary for me— and play with that angst in safe spaces. Nath, then, became my embodied character, who is a transmasculine individual who is trying to become fully machine, which served as a metaphor for exploring medicalized transition, falling into and nuancing the tradition originating in Donna Haraway's "A Cyborg Manifesto" that imagines the beings as "fiction mapping[s of] our social and bodily reality and as … imaginative resource[s]" (Haraway 1999, 272). While Haraway's post-structuralist feminist cyborg envisions it in a "post-gender world," for me, however, it became the very site to navigate my positionality, fears, and desires in a too-obsessed-with-gender world (Haraway 1999, 273).

Similarly, just as a cyborg is an augmented human, Nath, as opposed to the Fragmented Selves of before, instead served as Bowman's Experimental Self, to "overcome deficiencies of [my] 'real

self'" achieved through having the metaphorical things I am envious of (Bowman 2010, 172). While that process of being and becoming never really ends, with more peace in my gender identity means new queer characters can emerge for me like Nari, who uses he/they pronouns like me, but his gender isn't a focal point in his life. As such, areas of my social location, like religious trauma, that went unexamined due to the whole gender conundrum, can now be interrogated in a character in alternate and new form of Fragmented Self that only is possible because of the former Fragmented ones. Regardless of that sort of Self they are, queer characters in TTRPG thus become a means to access interiority and cradle it in one's hands, but at a distance, to better morph, understand, and accept that fluid essence through the eyes of another and affirmations of party members at one's table.

4. QUEER UTOPIAN PERFORMATIVITY ACROSS THE TABLE

TTRPGs' power in being a place for queer discovery and utopia is because of its communal setting that fosters and develops its own form of Munoz's queer utopia, which Felix Rose Kawitzky (2020) asserts in his article, "Magic Circles: Tabletop Role-Playing Games as Queer Utopian Method." While not conventional "performative space[s] apart" like queer night clubs, around a table players also partake in "the queer practice of forming bubbles of suspended, altered reality … [which] is rooted in a historical and contemporary necessity to have access to spaces that are not governed by rules that criminalize, threaten, other or ostracize queer lives" (Kawitzky 2020, 132).[2]

As a space apart, when entering a game, as scholar Sarah Lynne Bowman has attested, players enter a world with a "new set of social rules, both implicit and explicit"; this, in Session 0s and group discussions, rules and boundaries for content —such as whether homophobia and instances thereof are allowed in the game world— are established so players can establish or build utopia in-world (Bowman 2015, para. 4). In role-play spaces, participants can, according to game designer Morya Turkington (2016), "rehearse new ideas and new ways of being with each other" that have inherent political potential (Turkington 95). These spaces, when theorized as queer utopias, enable players —borrowing a lyric from Anaïs Mitchell's *Hadestown*— to bring "the world [they] dream about [closer to] the one [they] live in now" through practicing and enacting their own queer politics and inviting non-queer players to witness and experience subjectivities different from their own (Mitchell 3:21-24). This subsequently constructed performative utopia "is visual and social realization of [the players'] ideals and [is] dependent for its maintenance upon the community's acceptance and cooperation," which is achieved through collaborative gameplay, sincere role-play, and fostering safe spaces to explore the self (Bäcke 2012, 86)

Scholars conducting ethnography on TTRPG spaces like Nathaniel Rogers have noted that when this experience is validated, it encourages "players to pursue increasingly authentic play" (Rogers 2020, 31). For example, in his examination of the actual play podcast *Fast Times at D&D High*, Harold Bosstick notes how TTRPG spaces enable "activ[e] engag[ement] with identity construction through the system of the game primarily because [players and characters] com[e] to feel that this group of people are a safe place for [them] to explore" and to "vicariously experience [things like] male/male romance" (Bosstick 2021, 68). In another ethnography project, Toriana Shepherd notes how TTRPG spaces additionally "allow. . . for the understanding of the importance of normalized identit[ies]"

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2   The idea of a "performative space apart" is not only limited to utopias, as other scholars in game studies, have pointed to how a game space can be instead perceived as Foucault's heterotopia, which similarly is "a kind of effectively enacted utopia" in a place and time apart from normal reality, but still serves as a "reflection of the society in which they exist" (Hutchings & Giardino 2016, 10-1). For purposes of this article, TTRPG spaces are imagined through the concept of utopia, in efforts to continue past literature which focuses on queer utopianism but it could alternatively be (re)theorized through heterotopias.

because game-play allows "identities that challenge the real-world power structures [to be] normalized" in and around the table, be it anything from queer to neurodivergent identities (Shepherd 2021, 68-9). Similarly, studies have shown that many people are "motivated to begin playing [these games] because they recognize either consciously or subconsciously the opportunity to engage in a process that will help facilitate them developing their identity or their state of existence to a more idealized state, or the process of becoming," which is arguably enabled because of character, community, and embodiment (Coe 2017, 2856). In all these accounts, it is the community and social space of TTRPGs that provide a venue for exploration and acceptance, which cannot be easily achieved or created on one's own.

This also is not only present in personal accounts or ethnographies, as fantasy's power to construct queer utopia as a form of escaping a violent world is foregrounded in how the medium is represented in works of culture, such as Qui Nguyen's widely-produced 2011 play *She Kills Monsters*, where queer characters are enacted for these purposes. Set in Athens, Ohio in 1995, *She Kills Monsters* is about Agnes, an average school teacher, who plays a *D&D* module that her deceased sister, Tilly, put together in order to better understand her. Having seen her sister as "this nerdy little girl who [she] never talked to … because [they] didn't live in the same world," Agnes, through playing the module, ends up learning that her sister was bullied in school for being a lesbian and was in love with one of her classmates, Lilly (Nguyen 2016, 62). There, in the *D&D* world, Tilly, now the Level 20 Paladin Tillius, is dating Lilith, a scantily clad Demon Queen, and she created a world where everyone is queer and can live out their wildest fantasies, or in Lilly's case, explore what those may be in-world while being in the closet outside of it (Nguyen 2016, 33). When questioned as to why she and her friends escape via *D&D*, Tilly explains that part of it has "to do with wish fulfillment [because then, their wheelchair-using friend] Kelly gets to walk again and … [she] gets the girl" (Nguyen 2016, 66). Over the course of the play, while Tilly and the DM Chuck constantly remind Agnes that Tillius is not Tilly, because her real sister is deceased, Tillius serves as a "flexible representational stand-in" for her sister's interiority and reality in a world space where Tilly is able to live without fear (McMillan 2015, 13).

That is not to say that Tilly fully escapes in her module, as there are moments when reality bleeds through and the bullies materialize to hurl slurs and kill her girlfriend, which highlights that sometimes there are limits to how much one is able to mask with fantasy worlds and characters (Nguyen 2016, 58-60). In the end, the suffering that is often equated with queerness, in both community and outsiders' imaginings, can seep back into the narrative, but there is a cushion generated through "externalizing and processing traumatic experiences through narrative validation [which] allows TRPG players to integrate difficult experiences productively into their primary identity" (Rogers 2020, 40). While still a site of heavily emotional affect, in TTRPG spaces the "safety … achieved through validation and authenticity [generates] a 'performative utopia,'" for players to not only cathartically and therapeutically work through mental and emotional trauma but also "exercis[e] their capacity for imaginative, potentially revolutionary, hoping" (Rogers 2020, 45; Kawitzky 2020, 135).

The capacity for queer hope is intimately tied to ideas of queer joy and love, especially in a world with daily life and media populated by depictions of queer suffering, which can be exercised through emancipatory bleed (Kemper 2017). As opposed to bleed in role-play —which refers to the overlap that happens when a role-player's character's emotions impact the role-player outside of the game and vice versa— emancipatory bleed is a term coined by game scholar and designer Jonaya Kemper that posits this blurring "can be steered and used for emancipatory purposes by players who live with complex marginalizations" and use "immersion [to work] towards healing self-identified issues" (Kemper 2017). This emancipatory bleed can be experienced in regard to race, which is one area that Kemper posits, detailing how she "g[ave her]self the representation [of people of color that her and her] sister … did not have as children" via live action role-play, but also can be theorized alongside other

marginalized identities (Kemper 2017). For example, trans writer and gamesmistress Joan Moriarty cites emancipatory bleed when discussing how she experienced comfort in femininity vis-à-vis her *trans Trail of Cthulhu* character, which enabled her to "fe[el] what it was like to be a woman for whom transition was no longer a looming ordeal but a fait accompli" (Moriarty 2019). Similarly, emancipatory bleed can enable and enact queer hope for some players through experimenting or discovering one's sexuality, such as one of Rogers' interlocutors, Kyashi, who in an interview stated the following:

> I had always known that I was gay. I feel like I had known since middle school. I'd had crushes on girls before. So, having a gay character, was kind of like a, "Oh well." The next thing I know, I'm like "Ah fuck. I'm in love with my roommate. (Rogers 2020, 46)

In a similar way, exchanging in-character flirtatious letters with a single cis-gay man my age who was similarly repressed in Oklahoma during my *Dragon Age* campaign became what I mark as one of my first authentically gay experiences, where my own presentation and people's perceptions of myself were in alignment. Because I haven't medically transitioned, mis-gendering is as predictable as the sunrise, if not more frequent, in my life, which means as a queer transmasculine individual, queer men typically do not consider me romantically and if straight men do, it's because they think me a woman. The isolation and frustration that my linked gender and sexuality constantly cause me relationally isn't present in role-play experiences where I can project onto a character whose identity is not interrogated and externally evaluated in the way I am. As I'm largely not afforded out of game with the space to experiment with my sexuality while also being true to my gender identity, I can construct moments of utopia because of the distance and intimacy the table provides.

As someone who is also on the asexual spectrum, I struggle with feeling broken in comparison to my allosexual friends because I do not experience sexual and romantic attraction in the same way they do. For me to feel anything in that regard, it usually takes me a good three-to-five business years, so TTRPG spaces can be reparative in not only reminding me of the capability I have for it through experimenting with it, both in and outside of the game world. The game space thus becomes where my authentic self is performed out-of-character and inscribed and altered in-character; it's a site where I can build long-term platonic relationships with people who are doing the same. As such, this intimacy has made TTRPG spaces one of the few places that I've been able to experience attraction to other people. This emancipatory bleed needs to be carefully and ethically mediated in role-playing experiences, but the fact that it exists, regardless of if and how it's acted upon, can have reparative power that contradicts societal associations and personal trauma with notions of asexuality as lack and malfunction. One of my friends and I almost consistently have in-and-out-of-character chemistry whenever we play together and while I've been hesitant to act, the distancing of self and the characters provided by role-play have enabled me to feel safe expressing and reciprocating moments of queer desire. While these queer experiences are either fully fantasy or in the middle ground between it and reality, they once again reassert the how characters in fantasy spaces are not only Berlant's life-sustaining defenses, but also life-giving potentialities, interrogations, and expressions of interiority.

While queer characters often serve as a vehicle to come to terms with the self through projection, they are not necessarily always productions of the singular, which occurs when personal characters become public, communal forms of representation, which is a commonplace phenomenon in fandom involvement in actual play content. Tentpole series like *Critical Role, Dimension Twenty,* and *The Adventure Zone* that made *D&D* "cool" to play fall under this genre of actual play where a group of people play TTRPGs for an audience. Due to the fact that this sort of content is largely "created by small, independent creators [—at first, in the cases of shows whose popularity exploded and are

now sponsored—] who don't have to deal with executive oversight … and worry as much about local censors," actual play content has sizably more queer representation in comparison to other media forms, and subsequently attracts queer audiences (Sowa 2020). Studies have shown that queer representation in "media influence[s queer people's] self-realization, coming out, and current identities by providing role models and inspiration" and indicates that in the same way queer TTRPG characters can theorize and help understand the self, the same character can help other people do the same, in a different way (Gomillion & Guiliano 2011, 330). This is significant in the case of actual play content because when queer audiences find resonance in a character's journeys, exactly how their story turns out becomes a subject of discourse because it affects a community of projectors now.

For example, in the first campaign of *Critical Role* the bisexual set of twins Vex'ahlia and Vax'ildan both end up in visibly cisheteronormative romances which has caused fights within the fandom. While one camp believes that "the fact they both end up in 'straight' relationships negates their queerness," other fans assert that these complaints are biphobic because people remain "bisexual no matter their relationship status," which produces endless cycles of biphobic discourse (Van Os 2021, 95-6). Similarly, in the second campaign of *Critical Role*, the death of the bisexual genderfluid tiefling, Mollymauk, sparked outrage when audiences felt his death reinforced mass media "Bury Your Gays" tropes of queer suffering unnecessarily while other audiences asserted the death was unintentional because *D&D* is mediated by dice rolls and "his queerness had nothing to do with his death and it could have been any other character" (Van Os 2021, 97-8). In both cases, canonical material in conjunction with fan involvement colors if characters are perceived as authentic, relatable, and able to be incorporated into an understanding of self, which is further shaped by intra-queer identity politics discourse.

An alternative to these debates over whether or not characters that the queer community adopted as their own are harmful or helpful representations is highlighted in *The Adventure Zone,* where the creators inserted an intentionally vague, but still canonical transwoman Lup into the narrative. Because "as straight white men, [the McElroy's] do not have the personal experience to navigate sharing a story that foregrounds Lup's trans identity," they instead "le[ft] room for her story to be expanded by transgender fans, who have the life and experience to delve into any issues she may have faced in coming out and living as her true self" (McMullin & Hibbard 2021, 165). In this case, where Lup might not serve as an avatar, in full, for the creators themselves, they still allow her to be a plural, co-creation in the public eye. In both *Critical Role* and *The Adventure Zone*, strong reactions to queer representative figures, despite being controlled and performed by other individuals, highlight their importance in communal identity discourses and understandings, in addition to the ways that the other aforementioned examples can serve the personal.

5. CONCLUSION

Through performing as one's character, watching others performing queer characters, and fostering senses of queer utopia that are safe for expression and exploration, TTRPGs are a unique site of "life-sustaining defense" and life-giving force for members of the queer community (Berlant 2012, 45). Uri McMillan's conception of an avatar's function as a medium is a way to better understand how queer individuals conjure internal experiences and render them external in role-play spaces where real-world meaning can be made legible through character creation and development. While these avatars may shift over time or take forms of different shapes or characters, they all have equal power in making different steps in understanding and accepting self, which is evidenced in ethnographic accounts, cultural depictions, and my own experience. Placing theories of avatar and discussions of character in conversation with queer theory and game studies illuminates how exploring or discovering non-

cisheteronormative identities through TTRPGs is possible. In the end, it's as Tilly said, while queer performance does have "to do with wish fulfillment" it can also alter meaning in the real world, which this project is a small part of through generating new arenas and angles for interdisciplinary discourse and working towards my fellow queers in building our utopias in fantasy and reality (Nguyen 2016, 66).

REFERENCES

Bäcke, Maria. 2012. "Make-Believe and Make-Belief in Second Life Role-Playing Communities." *Convergence* 18, no. 1: 85–92. https://doi.org/10.1177/1354856511419917.

Banks, Jamie. 2015. "Object, Me, Symbiote, Other: A Social Typology of Player-Avatar Relationships." *First Monday: Peer Reviewed Journal on the Internet* 20, no. 2. https://journals.uic.edu/ojs/index.php/fm/article/view/5433/4208.

Berlant, Lauren Gail. 2012. *Cruel Optimism*. Durham, NC: Duke University Press.

Bey, Marquis. 2021. "Trouble Genders: 'LGBT' Collapse and Trans Fundamentality." *Hypatia*, 36, no. 1: 191–206. https://doi.org/10.1017/hyp.2020.52.

Bosstick, Harold. 2021. "To Become Who You Wish to Be": Actual-Play Tabletop Roleplaying Game Podcasts as Oral Storytelling Outlets for Queer Community, Representation, and Identity." M.A. thesis, Indiana State University.

Butler, Judith. 1999. *Gender Trouble: Feminism and the Subversion of Identity*. London: Routledge.

Bowman, Sarah Lynne. 2010. *The Functions of Role-Playing Games: How Participants Create Community, Solve Problems, and Explore Identity.* Jefferson, NC: McFarland & Company, Inc.

———. 2015. "Connecting Role-Playing, Stage Acting, and Improvisation." *Analog Game Studies* 2, no. 4 (May 11).

Coe, Darrin. 2017. "Why People Play Table-Top Role-Playing Games: A Grounded Theory of Becoming as Motivation." *Qualitative Report* 22, no. 11: 2844–63. https://doi.org/10.46743/2160-3715/2017.3071

Cross, Katherine Angel. 2012. "The New Laboratory of Dreams: Role-Playing Games as Resistance." *Women's Studies Quarterly* 40, no. 3/4: 70–88. https://doi.org/10.1353/wsq.2013.0026

de Wildt, Lars, et al. "(Re-)Orienting the Video Game Avatar." *Games and Culture* 15 no. 8: 1-19. https://doi.org/10.1177/155541201985889

Foucault, Michel. 1978. *The History of Sexuality Volume One*: *An Introduction.* New York: Pantheon Books.

Gomillion, Sarah C., and Traci A. Giuliano. 2011. "The Influence of Media Role Models on Gay, Lesbian, and Bisexual Identity." *Journal of Homosexuality* 58, no. 3: 330-354, DOI: 10.1080/00918369.2011.546729

Halberstam, Jack. 2018. *Trans*: a Quick and Quirky Account of Gender Variability*. Berkeley: University of California Press.

Haraway, Donna. 1999. "A Cyborg Manifesto." In *The Cultural Studies Reader*, edited by Simon During. 2nd ed. London: Routledge.

Hutchings, Tim, and Jason Giardino. 2016. "Foucault's Heterotopias as Play Spaces." *International Journal of Role-playing* 7 (December 2): 10-14.

Kawitzky, Felix Rose. 2020. "Magic Circles: Tabletop Role-Playing Games as Queer Utopian Method." *Performance Research* 25, no. 8 (2020): 129–36. https://doi.org/10.1080/13528165.2020.1930786

Kemper, Jonaya. 2017. "The Battle of Primrose Park: Playing for Emancipatory Bleed in Fortune & Felicity." Nordiclarp.org, June 21.

Mackay, Daniel. 2001. *The Fantasy Role-Playing Game: A New Performing Art*. Jefferson, NC: McFarland.

McMillan, Uri. 2015. *Embodied Avatars: Genealogies of Black Feminist Art and Performance*. New York: New York University Press.

McMullin, Michelle, and Lee W. Hibbard. 2021. "The Fandom Rushes In: Multiplicity and the Evolution of Inclusive Storytelling, Through Fan Participation in The Adventure Zone." In *Roleplaying Games in the Digital Age: Essays on Transmedia Storytelling, Tabletop RPGs and Fandom*, edited by Stephanie Hedge and Jennifer Grouling. Jefferson, NC: McFarland & Company, Inc., Publishers.

Moriarity, Joan. 2019. "How My Role-playing Game Character Showed Me I Could Be a Woman: Being Someone Else Gave Me a Glimpse of What Life Might Be Like if I Lived It Honestly as Myself." *The Washington Post*, October 18.

Nakamura, Lisa. 2001. "Race in/for Cyberspace: Identity Tourism and Racial Passing on the Internet." *Reading Digital Culture,* edited by David Trend. Hoboken: Blackwell.

———. 2008. *Digitizing Race: Visual Cultures of the Internet*. Minneapolis: University of Minnesota Press.

Nguyen, Qui. 2016. *She Kills Monsters*. London: Samuel French.

Mitchell, Anaïs. "Mitchell: Livin' It Up on Top (Live)" *Hadestown: The Myth. The Musical. (Original Cast Recording) [Live]*. Treleven Music, 2017.

Rogers, Nathaniel L. 2020. "A World Where They Belonged": Queer Women's Use of a Dungeons & Dragons Game to Experiment with, Express, and Explore Identity." MA thesis, San Diego State University.

Rowling, J.K. 2020. "J.K. Rowling Writes about Her Reasons for Speaking out on Sex and Gender Issues." J.K. Rowling, June 10.

Shepherd, Toriana. 2021. "Roll for Identity: A Study of Tabletop Roleplaying Games and Exploring Identity" M.A. thesis, University of Wyoming.

Sowa, Alexander. 2020. "Dungeons & Dragons: How Actual-Play Shows Are Boosting LGBTQ Representation." *CBR*, June 14.

Turkington, Moyra. 2016. "Rehearsing Difference." In *Larp Politics: Systems, Theory, and Gender in Action,* edited by Kaisa Kangas, Mika Loponen, and Jukka Särkijärvi, 95-104. Helsinki, Finland: Solmukohta 2016, Ropecon ry.

Tynes, J. 2010. "Prismatic play: Games as Windows to the Real World." In *Second Person: Role Playing and Story in Games and Playable Media*, edited by Pat Harrigan and Noah Wardrip-Fruin. Cambridge: MIT Press.

Van Os, G.L. 2021. "Diversity and Audience Interaction in Critical Role and The Adventure Zone." Essay. In *Watch Us Roll: Essays on Actual Play and Performance in Tabletop Role-Playing Games*, edited by Shelly Jones. Jefferson, NC: McFarland et Company, Inc.

Vincentelli, Elisabeth. 2020. "Queer Kids, Nerds and Sword Fights: It's The Hot School Play." The New York Times, July 2.

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Nordic Larp as a Method in Mental Health Care and Substance Abuse Work: Case *SÄRÖT*

Abstract: The *SÄRÖT* Trilogy was a pilot project that involved testing and developing Nordic larp as a method in mental health and substance abuse work. The project took place in southern Finland in autumn 2020 and illustrated the experiences of individuals with mental health and/or substance use disorders and their bystanders (friends, family, and other close ones). Data was collected from all three larps and from their preparations and follow ups, aiming to understand:

- How did SÄRÖT impact its participants' well-being?
- What features of SÄRÖT were transformative?
- How could SÄRÖT be further developed as a method?

Multiple methods, including observation, workshops, email interviews, and free feedback, were used to gather versatile data out of a relatively narrow pool of respondents. Triangulation and theme analysis were used to analyze the data. In the interviews, observation, and free feedback, the respondents reported changes in the way they experience their current situation in life. A new willingness for discussion or receiving help came up in some feedback and interviews. Participants reported having processed their own traumas, gaining tools for dealing with problems such as PTSD, or making active changes such as applying for a new job, getting help for mental health issues, or turning to social workers because of the *SÄRÖT* experience.

Empathizing with the portrayed character may be transformative. It may also enable facing reality from a new perspective, providing tools for our own lives. *SÄRÖT* indicated such transformative potential. However, the most impactful parts of *SÄRÖT*, according to the participants, were the workshops and post-game conversations, in a manner like that of replication therapy. *SÄRÖT*'s transformative character can also partly be attributed to *SÄRÖT* having an objective of which participants were aware. *SÄRÖT* has potential to become a purposeful tool for healthcare, service, or a product, if it is further developed with health care professionals and larp-designers.

Keywords: Nordic larp, mental health, well-being, transformation, trauma, substance abuse, live action role-playing

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1. INTRODUCTION

SÄRÖT (Finnish for "rifts," "fractures," or "distortions") was a pilot project intended to test and develop Nordic larp (i.e., live action role-playing) as a method in mental health and substance abuse work. It consisted of three Nordic larps that illustrated and vocalized the experiences of mental health patients, substance abusers, and concerned on-lookers (that is, the people closely connected to them, such as family and friends). Data was collected from the *SÄRÖT* larps, their preparations and follow-ups, with the goal of exploring these questions:

- How did *SÄRÖT* impact its participants' well-being?
- What features of *SÄRÖT* were transformative?
- How could *SÄRÖT* be further developed into a reliable method for mental health and substance abuse work?

By answering these questions, I aim to further develop *SÄRÖT* larps into a recuperative method and a therapeutic tool for handling difficult mental issues and supporting the well-being of the participants.

2. THE NATURE OF WELL-BEING

As a phenomenon, "well-being" is difficult to define. According to the World Health Organization (WHO), well-being is something that correlates with the surrounding culture and society, and is influenced by various individual, social, cultural, economic, material, and political variables (WHO 2015; see also Saari 2011, 10). It is related to an individual's needs and their fulfillment, as well as opportunities for participation in the environment. It also means living in a way that enables feeling the meaningfulness of one's own life (Lehikoinen & Vanhanen 2017, 15). According to sociologist Erik Allardt, *having*, *loving*, and *being* are the basic components of well-being, relating to fulfilling basic needs, creating social connections, and expressing oneself (Allardt 1976, 17-21).

The concept of individual well-being is thus understood to encompass the ability to identify and meet one's own needs, but also being able to pursue opportunities for reaching one's full potential (Ketovuori 2011, 107). Because of its connection to self-expression, we can see that human agency is central to well-being. This establishes a link between well-being and the arts, which create space for participation, doing something meaningful, and functioning as a part of something bigger (Pirnes & Tiihonen 2010, 207; Virjonen & Rouhelo 2018, 9-14).

In the research tradition of the arts and well-being, it is common to perform qualitative research and case studies about experiences, emotions, and other subjective topics. In such research, investigators rely upon individual estimations or accounts of their experience of their own well-being (Nenonen et.al. 2014, 236; Lilja-Viherlampi and Rosenlöf 2019; Lehto 2021). In this research, I also rely upon a respondent's self-estimation of their own well-being.

3. THE TRANSFORMATIVE POWER OF LARP

Nordic larp is a type of role-playing game where players create, enact, and govern the actions of their characters, defining and pursuing their own goals, with great freedom to choose their actions, using their own bodies as the physical tool for enactment (Leppälahti 2009, 25; Zagal and Deterding 2018, 47). The players act, think, and even experience emotions as their character. They dress up as their character and perform actions in a surrounding that supports the illusion of something that is not real. Nordic larp is participatory by nature and has been previously compared to theatre and playing (Stenros 2010; Montola 2012; Stenros 2015; Lehto 2021). *SÄRÖT* thrives from the tradition of Nordic larp. The three larps are set on specific settings, and revolve around certain, serious themes. *SÄRÖT* applies Nordic larp in an attempt to increase well-being.

The idea of being in a role or role-playing as something transformative and therapeutic is not new; pretend-play to increase understanding of oneself is found even in animal behavior. In the 1920s, Jacob Levy Moreno, the father of psychodrama, started to explore roles as social structure. This led him to investigate role-playing within therapeutic processes, resulting in *psychodrama* and, later, *sociodrama* (Moreno 1946). Psychodrama focuses on experiences and agency of an individual, whereas sociodrama shifts focus to societal issues, interaction, and group dynamics. They are both executed in group situations (Stenros 2015; Montola 2012, 102; Diakolambrianou 2021, 2022a; 2022b).

Carlson (2004, 75) argues that role-playing enables players to test reality, which then teaches responsible behavior in the real world. According to Theodore Serbin and Vernon L. Allen (1968), the key moments happen outside of the role-play itself, i.e., at a debriefing workshop or feedback session, where the therapist or counselor helps the participant develop their social and psychological skills by guiding their introspective reflection. This approach to using role-play as therapy is called *replication therapy* (Serbin and Allen 1968; Carlson 2004). Diakolambrianou, a psychotherapist, uses larp in psychotherapeutic practices, wherein she emphasizes the importance of post-game therapeutic reflection when done for psychotherapeutic purposes (Diakolambrianou 2021; 2022a; 2022b).

Moreno (1946), Serbin and Allen (1968), and Carlson (2004) use "role-play" to mean simulating situations with participants taking on assumed roles within them; they generally do not regard therapy as play in the same sense as does, for instance, Nordic larp. In recreational larping, *bleed* is a commonly occurring phenomenon, where the experience of playing in-character feeds back into everyday life, and vice versa. For example, enacting strong emotion in game might persist as psychological arousal post-game, or the fact of once having been in a psychiatric ward might make the in-game feeling of being there more complete (Montola 2010, 154-156; Bowman 2015; Connell, Kilmer, and Kilmer 2020). In recreational larps, bleed usually happens without clear intention or design, but with *SÄRÖT*, this is in fact one of its purposes.

Nonetheless, the *SÄRÖT* larps, besides being role-playing games in the Nordic larp tradition, also connect to the therapeutic vision of role-play. They combine the idea of role-taking from Moreno and Carlson with Serbin and Allen's interest in "what happens after the role" as a fundamental aspect of therapeutic workshop thinking. *SÄRÖT* also has similarities to *Ties that Bind*, a larp designed by Alexandros Alexiou, which has been offered as a paradigmatic example of a psychotherapeutic larp (Diakolambrianou 2022a). They both intend to explore interpersonal relationships and behavior for therapeutic or healing purposes, and stipulate that a mental health care professional should always be present.

To be sure, *SÄRÖT* larps are not intended as a form of psychotherapy, but rather a method for increasing well-being. *SÄRÖT* is designed to be a *transformational container*—a setting that is designed to be a safe space and enable transformation, growth, self-reflection, and understanding. It relies on trust, consent, and peer support. As a transformational container, *SÄRÖT* should offer an opportunity to engage in facilitated self-exploration, learn of oneself in relation to surrounding society, and gain an opportunity to transfer these insights into the player's own life (Bowman and Hugaas 2021). In this sense *SÄRÖT* is reminiscent of Viola Spolin's drama games which can be used for both therapeutic, pedagogical, and well-being purposes (Spolin 1963; Spolin Games Online 2018).

SÄRÖT also derives from the tradition of arts and well-being. Instead of trying to "solve" the participants' problems, *SÄRÖT* focuses on increasing awareness, perspective, and well-being as a more complex phenomena through experiential work. It does not include a direct skills-teaching component common in some psychotherapy approaches, such as cognitive behavioral therapy approaches (Bartenstein 2022). As such, it could be useful for addressing mental health care needs and could also be employed by mental health and peer support NGOs.

4. *SÄRÖT*

SÄRÖT was developed by the author and a psychiatric nurse, Janna-Riia Koivu. I am a community educator (BA) and a culture producer (MA), currently conducting my PhD about role-playing games and well-being. I have 16 years of larping experience both as a player and a game designer. I have previously explored larp as a method in youth work and reminiscence work (Lehto 2016; Lehto 2019a). At these previous projects, as well as during my own years in recovery, I have noticed the potential of larp as a method in addressing difficult issues. As a mental health activist, I also wish to break the silence about mental health issues and utilize my own experiences in my work. Janna-Riia Koivu and I came up with a concept of a larp trilogy addressing three difficult themes in a sensitive way. These themes—mental health, substance abuse, and the experiences of a bystander—became the main topics for one larp each, although they were all present to some degree in all three larps. We wanted to base the *SÄRÖT* trilogy on real stories, memories, and experiences, in a way similar to the reminiscence larp *Do You Still Remember the Day*?, which enabled deeper understanding of self and memories to its participants.

In this case, the larp situations, and especially being in a role, offered the players adequate distance to safely explore their own limits by comparing their memories and experiences with those of the characters they played, leading to natural self-reflection and to increased understanding in a peer-supportive situation (Lehto 2019a). With *SÄRÖT*, we wished to explore what kind of transformative experiences these realistic larps would provide to participants, having faced similar themes in their own personal or professional lives, and how the *SÄRÖT* experience would impact their well-being (Lehto 2021).

The work of designing *SÄRÖT* began in the summer of 2020 with collecting, via public and anonymous questionnaires, real stories and experiences about mental health, addictions, and substance abuse, in order to obtain different perspectives on these topics. All the characters and settings of *SÄRÖT* are based on these real-life stories. The larps are set in different situations where mental illness and addiction are experienced. The intention was to make *SÄRÖT* as realistic as possible, to avoid any harmful stereotypes, and to approach the situations in an understanding and empathic way. We also used our own experiences in the game design (e.g., in an attempt to set the game spaces as realistically as possible), but also tried to avoid bias caused by our own experiences. The objective was to create realistic representations and combine them with therapeutic workshops, as well as a follow-up, that support recovery before and after the runs.

The larps were then played during autumn 2020. Each lasted for four hours and had mandatory workshops before and after the game. Each run had eight participants and two organizers (community educator and a psychiatric nurse). Most participants had a personal connection to mental health or substance abuse issues. They were recoverees, bystanders, and professionals, but some participants did not report any connection to such background. The participants included experienced larpers as well as beginners (including first timers). Several participants attended more than one part of the trilogy. Altogether there were 18 different participants.

The first of the three larps, *Osasto I2 (Ward I2)*, was set in the everyday life of a psychiatric ward. The game's main themes were mental health issues and experiences from psychiatric treatment, and the characters were patients and nurses at the psychiatric ward. In addition, there were a few non-player characters (NPCs): visiting side-characters such as family members and loved ones of the patient characters, and a doctor. The NPCs were played by the

organizers. Their purpose was to support the game and deepen the experience of the players.

The second game, *Katkon jälkeen (After Rehab)*, was set during the birthday party of a 35-year-old man suffering from alcoholism. All 10 characters addressed the topic of substance abuse with their own perspectives, situations, and opinions. Many of them also address mental health issues, experienced personally or as a bystander of a loved one. The organizers also played characters in the second larp.

The third larp, *Ensimmäinen Joulu (The First Christmas)*, is set on the first Christmas after a family member's suicide, focusing on the experiences of the bystanders. In this larp, several characters also suffer from mental health issues and/or substance abuse. Societal themes such as transferring mental health issues between generations and the culture of not speaking are also strongly present.

While the perspectives to the *SÄRÖT* themes changed between the three larps, all themes were interrelated and were addressed in each part. These problems also often overlap in real life. *SÄRÖT* thus had off-game elements supporting well-being and safe self-reflection for the participants.

It was evident from the beginning, that with such intense themes and deep purposes, special attention to safety measures needed to be paid. Firstly, trigger warnings, including a clear message of not to apply to the game if it felt too heavy, was clearly visible on the website. There were also links to organizations offering help to anyone in need (e.g. a phone number to the crisis phone). The participants were also asked about their triggers and off-limit topics in their application sheets, and these topics were either not included in the larps at all, or the situation was discussed individually with the player. Also, the players were told before the larp to avoid these triggering themes. Simulation systems with intimacy, violence and substances were used and practiced before the games, as were safe words. A separate off-game room with a psychiatric nurse available was maintained at each set. The participants were told to listen to their own boundaries, and to have a low threshold for going off-game. In the post-game workshops, the participants were facilitated in sharing their important moments from the larp, writing messages to their character, and reflecting differences between themselves and their character. Two thank-you and follow-up emails were also sent to the players: one for each larp individually and one for the whole trilogy. They included remote workshop instructions about writing a letter to the character. All the messages also included links to further psychiatric help.

5. METHODS

5.1 Data Gathering

Data about participant experiences were collected from the *SÄRÖT* larps to better understand its impacts on the player's well-being, and the transformative aspects of *SÄRÖT*, but also to enable further development of *SÄRÖT* into a recuperative method and a therapeutic tool for handling difficult mental issues. The thematic questions of this study aim to explore the personal experiences of the participants and to find common denominators and patterns in these subjective experiences.

Email interviews were one of the chosen methods. These consisted of a set of questions that the respondents were asked to reply, reflecting their experiences during the *SÄRÖT* larps. The set of questions was sent to the participants immediately after the larps, and there was no time limit for the replies. The intention was to generate post-reflectivity as a part of the

transformative process in the participants. I decided to conduct the interviews via email instead of in person, because, according to Lucy Gibson (2010), e-mail interviews enable answering over a longer period and at the respondent's own pace. Also, one of the main principles of *SÄRÖT* was accessibility, and email-interviews flexibility respected that.

For the same reason, I included free feedback as a method. Some of the participants were not able or willing to answer the email interviews but wanted to take part in the research. They gave feedback via voice messages or messenger.

During the larps I gathered data by observing the workshops and conversations before and after the larps, as well as my findings in a diary. According to Tuomi and Sarajärvi (2009, 81), observation is often used to explain and deepen the information collected by other methods. Observation and reflection of spontaneous situations, of what has just happened, is often used in research situations that include interactions and happenings. Observation was also the only way to record the spontaneous conversation and bursts of emotions happening at the setting, which are also essential in understanding the phenomena.

5.2 Data Analysis

I analyzed the gathered data by using method triangulation. This means I interpreted the results parallelly, in comparative manner, deepening the results discovered by one method with another method. Method triangulation is often applied when the research has a limited group of respondents, or when trying to understand a new phenomenon better, and it is commonly used in case studies (Laine et al. 2007, 24). In addition, I used contextualist theme analysis. Braun and Clarke (2006, 6) define thematic analysis as a method for identifying, analyzing, and reporting themes or patterns within data. Although it only minimally organizes the data set, it tends to describe it in rich detail. Often it also goes even deeper, offering interpretations of the research topic (see also Boyatzis 1998). Thematic analysis as a method is divided in three sub-methods: realist, constructionist or contextualist method. Realism focuses on analyzing experiences, meanings and reality of participants, constructionism studies these things in relation to operating within society. Contextualist theme analysis is a mix of these two. It acknowledges not only the realism of the participants (their experiences, meanings, reality), but also the ways individuals make meaning of their experience, how this all relates to broader social context. (Braun and Clarke 2006, 11).

5.3 Ethics

The ethics of *SÄRÖT* as a larp-trilogy, as well as this research, have been carefully considered throughout the process. Having previously experienced heavy and triggering situations in recreational larps, we were aware that the *SÄRÖT* larps could be potentially triggering and even harmful to some of the players if executed carelessly. A case study with a small number of respondents and such personal research topics also causes some risks regarding participant privacy issues and potentially even safe research participation.

Janna-Riia is a psychiatric nurse, and I am a community educator, which means we both are either mental health care or counselling work professionals, with extensive experience in working with vulnerable target groups. At the beginning of the project, we decided to have as much professional insight in *SÄRÖT* as possible, and since our aim was to create a method usable for the topical NGOs, we decided to turn to them. *SÄRÖT* partnered up with several topic-related NGOs to ensure easy access to further information and actual help for

participants (and anyone else) if needed. The *SÄRÖT* website had clear links and a "HELP" button, where you could find someone to talk to from Mieli ry with just one click. At the game sites, we also used the NGO procurers as props. The co-operation with the NGOs was strongly present throughout the project, and info about their services was also made available at the public *SÄRÖT* art exhibition (Galleria Barker 2021).

All players were informed of the serious nature of the *SÄRÖT* larps from the beginning and given specific trigger warnings. They were told not to sign up to *SÄRÖT* larps if they felt like the topics were too close to home, triggering or still sore in their personal lives. It was important that the participants felt ready to dive into these topics. Also, the game was only for adult players. All participants were informed that they may at any point cancel their participation in *SÄRÖT*. Several potential players asked further questions about *SÄRÖT* larps before signing up, and we answered in detail, reassuring their decisions on whether to sign up in *SÄRÖT*.

We also paid special attention to safety in the game design. Pre-game work, and especially post-game work are essential for not only the transformative experiences to reach their full potential, but even more importantly, in creating a safe space for both play time, as well as the neutral space (that used to be the game space) after the game. Special attention was paid to getting out of the role after the game and turning the heavy experience into a positive resource in the debriefs facilitated workshop. In addition to always having a psychiatric health-care professional available (in- and off-game), all three larps had dedicated off-game spaces, and an off-game contact (also a community educator, other than the game master) available at the set, in case someone wanted to take a break from the game. Safe words and simulation techniques were used (for intimacy, violence, drugs, substances), and the players were also given advice to step back from intense situations with a low threshold. Everyone agreed before the games that it was okay to go off-game if someone felt like it and they also could turn to the organizers and the psychiatric nurse at any point before, during, or after the game.

All participants were also aware of the data being gathered and the research being conducted from the larps. They were asked to sign a research permission and informed about the research practices (e.g. data storing), as well as their rights regarding the study (e.g. anonymity of the research, their option not to take part, or drop out of the study at any point). Knowing the intensity of larp as a method, a statement was also asked and received from the Tampere University's ethical board.

6. RESULTS

6.1 Before the Larps

The first set of data was collected when the participants arrived at the game locations. At this point, the locations were new to the players, and they knew that they would be larping there shortly. In my research diary, I write about the atmosphere in the beginning of all three larps being eager and expecting. Before the first larp, participants expressed their urge to larp again, after the break caused by COVID-19. The second larp was more difficult to organize due to many cancellations under the corona restrictions. Nevertheless, we had players for all characters, and they were eager to play. For organizing, the third larp was different from the other two, since its participants were very active before the game on social media: posting pictures, developing their characters and their relationships, and networking. In addition, a Christmas dinner was prepared to be served in the larp.

According to the email interviews, 8/10 respondents felt positively about getting ready for the larp. One of the respondents was relatively neutral and one described having a stressful week before the larp. Others used words like anticipation, eager, positive, interested. The participants of the third larp describe their preparation in more detail. They seem to be quite committed in researching background for their role:

"I spoke to [] … about being a cantor and I managed to build a great basis for my character's behavior and attitude towards life." (8)

"I made a diary for my character's deceased daughter and found a picture of her in pixabay." (9)

One of the respondents reported being worried about maintaining the line between simulation and real life, for instance, hurting oneself. Another one reported listening to a comedy podcast to shake off the preparation for the larp. One of the players was just happy to finally wear something Christmassy.

Waiting for the game to start has been described as fun, social, and exciting. The respondents report chatting with other participants, agreeing about shared history between characters, thinking about if the themes will be too hard, listening to the playlist they made for their character, and slowly getting ready to dive into the character.

6.2 During the Larps

According to my research diary, the atmosphere of the first *SÄRÖT* larp was realistic, like in a real psychiatric ward, with "a lot of laughing and crying." One of the respondents wrote in the e-mail interview, "I got to re-live my experiences from at a psychiatric ward. In this game the ward was smaller, and the community even closer…My hospital-period back in reality lasted for three weeks, and I was afraid to go back home, just as my character [was] now" (3). Another feature the respondents found reminiscent to their real-life experiences was the relationships of the characters: "My character was very close to another character and playing this relationship as a part of the ward- experience was amazing" (3). Another player remembered "a letter from a loved one. My character interpreted it as a break-up, although that was not the intention. I got to cry out the pain and it felt purifying" (4). Several respondents also pointed out specific moments, like putting a mandarin in a microwave, seeing the doctor, playing a game of cards, hiding a knife, comforting a friend, or talking to their roommate. All of them also write about the importance of the character's thoughts or emotions: being anxious about electric treatment, being impulsive, an active decision not to give up, reacting to the news from a doctor, crying over a phone call or a letter.

The second larp was also intense, and heavier than the first one. I also played a character in this larp and wrote to my diary:

My game turned out to be about the difficulty for an alcoholic to admit that they have a problem, because admitting it would mean admitting one needs to change their whole life, not just the drinking. When alcohol defines your whole way of life and all your social relationships, giving it up feels impossible. It is not allowed even as a thought.

The game crawled under my skin and probably it happened to others as well. If Jari (my character) is this blind to his problems, then maybe I am to mine as well? Maybe not about alcohol as Jari, but eating, or toxic relationships?

Once again, people reminisced about their character's actions, but the focus was upon their thoughts and emotions. According to the email interviews, this time the emphasis was on negative emotions, such as sadness, anger, heartbreak, guilt, an urge to pretend everything is okay, and the need for a substance. One of the players wrote in their email-interview:

In the game my character and his previous girlfriend had a conversation, where my character tried to make her quit drinking. The bargaining where the girlfriend started: 'What if I just drink one? Or two? Four isn't that much, is it?' It was heartbreaking. I have had a similar conversation in real life" (6).

Another player wrote: "In this game I got to see different problems that people face in their everyday lives" (7), mentioning specifically the anger that they felt when their old bully did not remember them, and feeling sad and a little guilty seeing the sister of an alcoholic being so worried about her sibling.

According to my diary, the third *SÄRÖT* larp felt most enjoyable to me personally.

The players were very natural and genuine in their characters and the family dynamic felt immensely real. It was just like a real family. All the characters were broken in their own ways, trying to support one another, but still sometimes getting devastated by the grief.

I do not comprehend how so many emotions fit in just four hours: sadness, grief, longing, love, caring, loneliness. And eventually talking, which enabled understanding, giving and receiving help, and noticing that others carry the same burden as you, and that it can be shared. The game ended on a note of hope.

Other players describe the atmosphere as genuine, relatable, safe, and emotional. Especially the intensity and closeness of the family were mentioned in several responses. Many respondents found comfort during game from the discussions they had before the game with other players: For instance, a player that was nervous about playing a controversial character wrote:

(While playing the character) I felt this sense of security that, that I (outside of character) have not been able to endure before. (Another player) told me before the game, that they would protect me if someone else turns against me… Even now I feel like I do not need to survive alone. Before, I had to. (8)

Another player (10) wrote in detail about the emotions and thoughts experienced, when their character felt unseen, unworthy, unimportant, eventually self-destructive and finally ended up hurting themselves. They also describe how they received help, tied up the wounds together with another character, and had the opportunity to genuinely confront one another

and reply with honesty to, "How are you?" Another respondent describes the transformation of the atmosphere beginning as stiff, turning into a storm of anxiousness, shifting to sharing and togetherness and hopefulness.

6.3 Immediately After the Larps

According to the research diary, the most impactful moments happened right after the games, during the post-larp workshop and free conversations, in all three cases. I have described these moments as significant and most important. The workshops consisted of a facilitated self-reflection that guided the player away from the character, identifying differences between oneself and the character, and sending messages to the character. The guided reflections transferred interesting moments from the game into impactful realizations. In addition, the shared game experience enabled a peer-supportive free conversation amongst the group, even with no other shared background. In all three cases the players continued the conversation after the workshop on their own initiative, turning the discussion to their own experiences and similarities between themselves and their characters.

 After the first larp, the participants discussed mainly about their (or their close one's) mental health history in a deep, peer-supportive manner. After the second game the players had long self-reflective conversations about their experiences of substance abuse. One of the players realized that they need help and talked about this to another player. They had already found out about the possibilities of seeing a nurse. After the third game and the workshop the conversation was yet again deep, supportive, understanding, and caring. People – most of them strangers aside from the larp experience that happened the same day – talked very openly about their own past difficulties and supported one another. In addition, a player that participated in the second part also shared that they had realized their unhappiness in working life because of participating in the second larp. They had applied for a new job and gotten a call for the interview. I have also written a note that says, "It is curious how playing together for 4 hours enables talking openly about topics that one stays silent for 10 years in a working community."

 The participants have described their feelings about the moments after the larps as (positively) relieved, tired, happy, sentimental, immersed, freed, awesome, empowered, and satisfied. Several respondents wrote about how they are happy to be themselves again. Many also wrote about how sorry, supportive, or otherwise emotional they feel for their character. One of the respondents wrote:

> I could do it. I did not break. I am able to face these things now that I am better, and the wounds are not sore anymore. (4)

 Their feelings after the workshop were described as touched, communal, tired, satisfied, liberated, healed, and relieved. Several respondents wrote that they enjoyed talking to other players after the game. At the moment of going home, most of the players were tired and thinking about the game and conversations during and after the game.

6.4 Afterwards

According to the email interviews, the participants were still thinking about their experience a few days after participating. Wishful, empowered, satisfied, good, tired, and whole are

some of the words used to describe the respondent's feelings. One of them was left thinking about the human mind, and heredity of mental health issues. Another respondent thought about what their character could have done differently if they had more knowledge about the situation. Several respondents were left thinking about the conversations that happened after the games, one even thinking how they could help another player. Another one wrote that they now realize how lucky they are not having mental health issues. Several respondents reported the sense of opening emotional locks or realizing new things about their lives or relationships.

After all three larps, the conversations were free and intense. After the second game, three different people came to speak to one and the same player about their situation and realizing a need for transformation. "The players were feeling very emotional after the game and because the group was small enough, we were able to have some extremely important conversations… I told about my own mental health background. I believe that this lowered the threshold for these people to come and talk to me."

In retrospect, seven of the 10 email interview respondents also felt like participating gave them tools or perspective to their own life, healing process or work. One of them wrote, "I got tools and easing in living with my PTSD." Another felt like the perspectives they got from the game situations might help them with addressing their own difficulties. Someone else wrote that they now see their privileges better. Another has a new perspective for meeting an anxious person in a working situation.

In less formal, free feedback a participant that took part in all three larps wrote, "*SÄRÖT*-larps made me see that I have problems, but that it is ok, and they are survivable." Another one wrote, "On top of my mind lingers a feeling that others think that I'm nice… Somehow, now it is easier for me to receive positive feedback and to actually believe it." One participant reported processing their own trauma (loss of a mother) through the character, and "finally finding peace."

7. DISCUSSION

SÄRÖT was transformative in several ways. The interviews, observation and free feedback vocalize the transformation. Respondents reported for instance a change in a way they see themselves, the situation they are in, or their need of help. A new willingness to discuss their situation or seek help came up in several feedback comments and interviews. Some reported having processed their own traumas (for instance loss of a mother or handling their PTSD). Professionals reported gaining new perspectives and tools for their work. Likewise with psychodrama, sociodrama, replication therapy, CBT larp, and psychotherapeutic larp, drama, role-play or larp may generate a therapeutic transformation, increase understanding of self, and (often after some time) enable going through or push towards therapeutic processes (Bartenstein 2022; Diakolambrianou 2021; 2022a; 2022b; Spolin 1963). In this kind of larp, it is essential that an easy access to professional help is available when the need for it emerges, which, in some cases, might take some time (even months). Respondents also reported making active changes in their lives because of participating in *SÄRÖT*, such as applying for a new job, getting help for mental health issues, or turning to social workers. These are examples of the concrete transformative nature of the processes initiated by *SÄRÖT*.

According to the data, the participants attributed the transformativity to several elements of *SÄRÖT*. Firstly, attending a larp is impactful and transformative in itself—

especially during a global pandemic. People are excited about seeing each other and doing something immersive and inspiring, even if it is marketed as serious and not funny or entertaining. In the framework of cultural agency, the transformativity of attendance itself is easily understandable. According to Simon (2010), the key to the transformativity of cultural agency lies in the fulfillment of the person's needs to contribute and succeed (19-20, 26-27). Also, participation, in the sense of functioning together with others as a part of something bigger, and the sense of meaningfulness as an actor both increase an individual's well-being (Pirnes and Tiihonen 2010, 207; Virjonen and Rouhelo 2018, 9–10). The positive impacts individual gains from a cultural agency depends also on their level of involvement as experiencers, partakers, and actors (Tomka 2013, 261; Virjonen and Rouhelo 2018, 10; Lehto 2019b; 2021). The third *SÄRÖT* larp underlines this notion: it is described as the most realistic one, and it is also the one where the players were most active before the larp—they took charge of their own cultural agency, creating a stronger experience for themselves. Acts of building the character, such as creating a playlist or writing a diary of a deceased daughter also made the larp experience deeper and more personal (see Tomka 2013, 261; Virjonen and Rouhelo 2018, 9-10; Pirnes and Tiihonen 2010, 208; Simon 2010, 19-27; Lehto 2019a; Lehto 2021).

During the *SÄRÖT* larps the most transformative moments seem to emerge when the interacting with another character feels emotional or is somehow attached to the player's own life experiences – when bleed happens (see Montola 2010; Bowman 2015; Connell, Kilmer, and Kilmer 2020). Also, moments when something meaningful happens, such as harming oneself, ending a relationship, a call from mother, are transformative. Often these two happen simultaneously. The togetherness in experiencing these transformative moments with someone is also experienced as transformative and sometimes therapeutic in itself. Talking, vocalizing, and impersonating the character's emotions and thoughts seem to be important. Immersive moments, when the in-game-family feels like a real family or an active falling apart happens over choosing alcohol over relationship, seem also impactful and thought-provoking. Such moments are transformative on two levels: during the event and during the post-reflection. Also following other characters and listening to them seems to evoke realizations (of self) and eventually transformation in post-reflection. The atmosphere itself is also described as transformative, creative, trusting, peer-supporting, reflective, and open, as a transformational container should be (Bowman and Hugaas 2021). As Carlson says it, *SÄRÖT* met reality in a way that allowed us to find, test and develop tools and empowerment in our own lives (2004, 75). These all are also elements that occur in most recreational larps and describe the transformative features of larp as an activity.

Then again, in the case of *SÄRÖT*, the most therapeutic parts in all three larps were the facilitated debrief workshops and post-game conversations, similarly to Serbin and Allen's (1968) replication therapy. In the workshops the participants got to share their important moments from the larp, write messages to their character and reflect differences between themselves and their character. After each workshop, the participants initiated a deep, peer-supportive conversation around the game themes. The availability of someone to talk or write to, even some weeks after the games was important. So was knowing where to turn to when someone realizes they need help, in other words, professionalism. However, the players did not seek to speak to the mental health professional or counselor at the location, but spoke to one another in a peer supportive manner. All players knew that the intention of *SÄRÖT* was to evoke transformation and even therapeutic processes, but their natural choice was to find peer support. This indicates that when used in an NGO setting, where peer support groups are already an established practice, serious methodological larps like *SÄRÖT* could work as a natural catalyst for peer-supportive conversation.

It appears that a part of *SÄRÖT*s transformative nature was caused by the fact that *SÄRÖT* had a therapeutic goal and the participants were aware of it. This was essential in the creation of a transformational container (Bowman & Hugaas 2021). The participants knew what to expect; they did not come to *SÄRÖT* just to have fun, but to explore and reflect. Hence, they were also willing to focus and discuss after the games. Being used as a method made *SÄRÖT* impactful as a method, and the participants' openness to the process enabled its efficiency.

  SÄRÖT does have potential to become a purposeful tool for the relevant organizations, and it could also be applied for pedagogic and therapeutic purposes, in a manner reminiscent of Viola Spolin's drama games (Spolin 1963; Spolin Games online 2018). To get there, it would need to be further developed with its practitioners, whether NGOs, counselors, pedagogues, or therapists. However, if executed carelessly, *SÄRÖT* could potentially be triggering and even cause harm to some participants. Hence, it is always necessary to have a mental health professional present and possibly a counselor ready to react for safety reasons. For these reasons, the game material will not be openly published. Then again, it is also important for this person not to control the space too intensely, for the natural peer-supportiveness to emerge. It is also important to facilitate delicately the post-game reflection towards the therapeutic purposes: healing, increased understanding, and fruitful conversation. In addition, in its current form, *SÄRÖT* needs an experienced larp organizer. Developing *SÄRÖT* into an easily executable package is possible but needs further game design. It could also be further developed into a service or a series of products.

  As a case study, the amount of data in this research is limited and applies to *SÄRÖT* trilogy. However, it evokes further questions. Larps are often experienced as impactful and possibly transformative. The results of the *SÄRÖT* case study suggest that if the players know about the larp's therapeutic purposes, it brings additional value. In this case, the specific facilitation of the pre- and post-workshops were also important. This suggests that that there could be differences between the transformativity of recreational larps and therapeutic larps. It would be interesting to investigate this comparison, not only qualitatively, but also in a quantitative manner, with a longer timeframe, and a larger number of respondents. Simple questionnaires, such as WHO5, could be one possibility for gathering such quantitative data. WHO5 has been successfully used to measure change in (experienced) well-being in art therapy groups (Zubala et al 2017; Topp et al 2015). Setting recreational and therapeutic larp in the context of arts and well-being could offer some interesting tools for larp researchers. On the other hand, in attempt to understand the transformativity of immersion, I'd like to see the underlying mechanisms of the larp-related phenomena to be researched in the context of other art forms. This could include questions such as whether bleed happens in drama therapy or in music therapy, and comparing their transformativity to that of larps.

8. CONCLUSION

SÄRÖT was a pilot project, testing and developing Nordic larp as a method in mental health and substance abuse work. The *SÄRÖT* trilogy illustrated the experiences of mental health patients, substance abusers, and their bystanders. The larps took place in southern Finland, autumn of 2020.

  Data was collected from all three larps by multiple methods, including observation, workshops, email interviews, and free feedback. In the data sets gathered by the interviews,

observation, and free feedback, the respondents reported moving onwards with their inner processes, changes in the way they see themselves or experience their current situation in life. Some respondents also took action to better their situation.

SÄRÖT had several features that enabled transformativity, both in the gameplay situations, as well as off-game. Firstly, the cultural agency of attending a larp as a player is transformative in itself—especially in the times of a global pandemic. The depth of the impact of the experience is also dependent on the participants' own level of activity, according to the principles of cultural agency. Secondly, the most transformative experiences during the *SÄRÖT* gameplay seem to have been tied to emotional interplay with other characters, in the game coming close to oneself or the occurrence of bleed, and memories of its impactful moments, sense of togetherness, self-expression, and deep immersion or empathy towards the character. The overall atmosphere was also described as transformative and healing. Thirdly, as a method, *SÄRÖT* had off-game elements supporting the well-being and safe self-reflection for the participants. Each larp was followed by a facilitated workshop and a peer-supportive conversation, initiated by the players themselves. It was during these conversations that some of the players realized and vocalized their need for help or a change in their lives, and actions have already taken place. All participants were also aware of *SÄRÖT* being a method and having therapeutic goals. The participants willingness to dive into the process was also essential to its efficiency.

SÄRÖT does have potential to become a purposeful tool for the topic related NGOs, but it could also be applied for pedagogic and therapeutic purposes, reminiscent of Viola Spolin's drama games (Spolin 1963; Spolin Games online 2018). However, it requires further user-orientated development. Developing *SÄRÖT* into an easily organizable package, service, or a product could also be possible.

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REFERENCES

Allardt, Erik. 1976. *Hyvinvoinnin ulottuvuuksia.* Helsinki, Finland: WSOY.

Bartenstein, Lennart. 2022. "Larp in Cognitive Behavioral Therapy: Making Larp a Standard Method." Nordiclarp.org, April 22.

Bowman, Sarah Lynne. 2015. "Bleed: The Spillover Between Player and Character." Nordiclarp. org, March 2.

Bowman, Sarah Lynne, and Kjell Hedgard Hugaas. 2021. "Magic is Real: How Role-playing Can Transform Our Identities, Our Communities, and Our Lives." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 52-74. Oslo, Norway: Knutepunkt.

Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3, no. 2, 77-101. https://doi.org/10.1191/1478088706qp063oa.

Carlson, Marvin. 2004. *Esitys ja Performanssi: Kriittinen johdatus.* Helsinki, Sweden: Helsingin yliopiston Taiteiden tutkimuksen laitos, Teatteritiede.

Connell, Megan, Elizabeth D. Kilmer, and Jared N. Kilmer. 2020. "Tabletop Role Playing Games in Therapy." In *Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy,* edited by Anthony. M. Bean, Emory S. Daniel Jr., and Sarah. A. Hays, 75-93. London: Leyline Publishing Ltd.

Diakolambrianou, Elektra. 2021. "The Psychotherapeutic Magic of Larp." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 95-113. Oslo, Norway: Knutepunkt.

———. 2022a. "Psychotherapeutic Applications of Role-Playing." Transformative Play Initiative. YouTube, February 20.

———. 2022b. "Beyond the Couch: Psychotherapy and Live Action Role-Playing." Transformative Play Initiative. YouTube, March 9.

Galleria Barker. 2021. *SÄRÖT/RIFTS 28.5-13.6.2021.*

Gibson, Lucy. 2010. "Using Email Interviews." *Realities (National Centre for Research Methods),* Toolkit #9.

Ketovuori, Mikko. 2011. "About the Arts, Culture and Well-Being." In *Arts and Skills—Source of Well-Being: Third International Journal of Intercultural Arts Education* (Research Report 330), edited by Heikki Ruismäki and Inkeri Ruokonen, 103-109.

Laine, Markus, Jarkko Bamberg and Pekka Jokinen. 2007. Tapaustutkimuksen käytäntö ja teoria. In *Tapaustutkimuksen taito*, edited by Markus Laine, Jarkko Bamberg and Pekka Jokinen, 9-40. Helsinki, Finland: Gaudeamus.

Lehikoinen, Kai, and Elise Vanhanen. 2017. "Johdanto." In *Taide ja hyvinvointi. Katsauksia kansainväliseen ja kotimaiseen tutkimukseen,* edited by Kai Lehikoinen and Elise Vanhanen, 5-30. ArtsEqual.

Lehto, Kerttu. 2016. "#Näkökulmaa:. Larp nuorisotyön menetelmänä." BA thesis, Humak University of Applied Sciences.

———. 2019a. "*Muistan vielä sen päivän – larp muistelutyön menetelmänä.*" MA thesis, University of Turku.

———. 2019b. "Larp ja kulttuurinen toimijuus." In *Mitä saisi olla? Kulttuuria Miesten vuorolla*, edited by Marjo Kolehmainen, 62-73. Humanistinen ammattikorkeakoulu julkaisuja, 91, Humanistinen ammattikorkeakoulu.

———. 2021. "Role-Playing Games and Well-Being" *International Journal of Role-Playing* no. 11: 72-94.

Leppälahti, Merja. 2009. *Roolipelaaminen. Eläytymistä ja fantasiaharrastusverkostoja.* Nuorisotutkimusverkosto.

Lilja-Viherlampi, Liisa-Maria, and Anna-Mari Rosenlöf. 2019. "Moninäkökulmainen kulttuurihyvinvointi." In *Taide töissä—Näkökulmia taiteen opetukseen sekä taiteilijan rooliin yhteisöissä*, edited by Ilona Tanskanen, 20–39. Turku: Turun ammattikorkeakoulu.

Montola, Markus. 2012. "*On the Edge of the Magic Circle: Understanding Role-Playing and Pervasive Games.*" PhD diss., Tampere University

———. 2010. "The Positive Negative Experience in Extreme Role-Playing." In *The Foundation Stone of Nordic Larp*, edited by Eleanor Saitta, Marie Holm-Andersen, and Jon Back, 153-167. Knutpunkt 2014.

Moreno, Jacob Levy. 1946. *Psychodrama*. Bristol, England: Beacon House.

Nenonen, Tellervo, Risto Kaikkonen, Jukka Murto, and Minna-Liisa Luoma. 2014. "Cultural Services and Activities: The Association with Self-Rated Health and Quality of Life." *Arts & Health: An International Journal for Research, Policy and Practice* 6, no. 3: 235-253.

Pirnes, Esa, and Arto Tiihonen. 2010. "Hyvinvointia liikunnasta ja kulttuurista. Käsitteiden, kokemusten ja vastuiden uusia tulkintoja." *Kasvatus & Aika* 4, no. 2: 203–235.

Saari, Juho. 2011. "Johdanto." In *Hyvinvointi. Suomalaisen yhteiskunnan perusta*, edited by Juho Saari, 9-32. Helsinki, Finland: Gaudeamus Helsinki University Press.

Serbin, Theodore, and Vernon L. Allen. 1968. "Role Theory." In *The Handbook of Social Psychology, Second Edition*, Vol.1, edited by Gardner Lindzey and Elliott Aronson, 488-567. Boston, MA: Addison-Wesley Publishing Company.

Simon, Nina. 2010. *The Participatory Museum.* Santa Cruz, California: Museum 2.0.
Spolin Games Online. 2018. "Improv Games and Exercises Online."

Spolin, Viola. 1963. *Improvisation for Theatre.* Evanston, IL: Northwestern University Press.
Stenros, Jaakko. 2015. "*Playfulness, Play, and Games: A Constructionist Ludology Approach.*" PhD diss., Tampere University.

Stenros, Jaakko. 2010. "Essay: Nordic Larp as Theatre, Art and Gaming." In *Nordic Larp*, edited by Jaakko Stenros and Markus Montola, 300-315. Stockholm, Sweden: Fëa Livia.

Stenros, Jaakko and Markus Montola. (Eds.) 2010. *Nordic Larp.* Stockholm, Sweden: Fëa Livia.

Tomka, Goran. 2013. "Reconceptualizing Cultural Participation in Europe: Grey Literature Review." *Cultural Trends* 22, no. 3-4: 259–264.

Topp, Christian Winther, Søren Dinesen Østergaard, Susan Søndergaard, and Per Bech. 2015. "The WHO-5 Well-Being Index: A Systematic Review of the Literature." *Psychotherapy and Psychosomatics* 84, no. 3: 167-176. https://doi.org/10.1159/000376585

Tuomi, Jouni, and Anneli Sarajärvi. 2009. *Laadullinen Tutkimus Ja Sisällönanalyysi*. Helsinki: Tammi.

Virjonen, Kaija, and Anne Rouhelo. 2018. "Kulttuurisote: Varsinais-Suomen osahanke." *Tule Luo Taide: Opetus ja kulttuuriministeriön julkaisuja*.

World Health Organization (WHO) Regional Office for Europe. 2015. *The European Health Report 2015: Targets and Beyond—Reaching New Frontiers in Evidence.* Copenhagen, Denmark: WHO Europe.

Zagal, José P., and Sebastian Deterding. 2018. "Definitions of 'Role-Playing Games'." In *Role-playing Game Studies: Transmedia Foundations*, edited by José P. Zagal and Sebastian Deterding, 19-51. New York: Routledge.

Zubala, Ania, Donald J. MacIntyre, and Vicky Karkou. 2017. "Evaluation of a Brief Art Psychotherapy Group for Adults Suffering from Mild to Moderate Depression: Pilot Pre, Post and Follow-Up Study. *International Journal of Art Therapy* 22, no. 3: 106-117. DOI: 10.1080/17454832.2016.1250797

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Live Action Role-playing (Larp) in
Cognitive Behavioral Psychotherapy: A Case Study

Abstract: Role-play is an established tool in psychotherapy. Recent literature has indicated the similarities between live action role-playing (larp) and psychotherapy. In cognitive behavioral therapy (CBT), which is one of the most widespread therapeutic approaches, Role-play is a tool for developing desired target behavior (Fliegel 2020). This also applies to so-called skills groups in CBT. One form of these skills groups is the Gruppentraining sozialer Kompetenzen (Hinsch et al. 2015). Some literature has highlighted the similarities between role-playing methods used in CBT-oriented skills groups and larp (Aschenbrenner 2013, Balzer 2008). A deficit in social skills is associated with a variety of mental disorders (Segrin 2001). The use of a CBT-oriented larp may therefore be helpful in the treatment of several mental disorders. A standardised form of CBT-oriented larp in the sense of a clinical manual does not yet exist. There is also no empirical evaluation with questionnaires of such a therapeutic larp yet. This article presents the implementation and empirical evaluation of a standardised CBT-oriented larp. This clinical case study was conducted with 6 patients with mental disorders.

   Participants were aged 30 years or younger and all had at least one affective disorder. Established clinical screening questionnaires were used for assessment. Data were collected in a pre-post follow-up design. The study shows that this CBT-oriented larp is feasible with people with mental illness. Qualitative data show good goal attainment and positive experiences among participants. Short-term positive developments were also found in the screenings. However, an empirical statement about the effectiveness of the larp is not yet possible; in the long term, the screenings even show negative trends.

Keywords: cogitive behavioral therapy, larp, manual, affective disorders, longitudinal, live action role-playing

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1. INTRODUCTION

1.1 Theoretical Background

Role-play is a foundational component of established forms of psychotherapy such as psychodrama (Kipper, 1992). Recent publications have indicated the similarities between so-called live action Role-playing (larp) and psychotherapy (Diakolambrianou 2021; Burns 2014; Fatland 2016; Linnamäki 2019; Mendoza 2020).

   Larp is a form of role-playing, which has so far mainly been used in the leisure sector. Participants play a role of their own choice in a suitable costume and act out a mostly pre-structured story set in a fictional or historical setting (e.g., medieval fantasy) (for a more comprehensive definition, see Tychsen 2006, 254-255).

   In a larp, there are the players (also called player characters, PCs), who take part. The PCs play a role (a character) that they have thought up beforehand and improvise in the game acting how their character behaves. Conversely the game is driven by extras who offer interaction to the PCs, so-called *NPCs* (non-player characters). They often know information about the game that the PC are not fully aware of and that the PCs can learn from the NPCs. Sometimes NPCs are just simple interaction partners for the presentation of trade or combat.

   The game is managed by one or more game masters (GMs). The GM usually has an overview of the whole game. The GM can give instructions to the NPCs on how to behave towards the PCs, but also towards the PCs if there are any rule ambiguities, for example. The GM is, so to speak, "in charge" of everyone in the game.

In the field of education, there are already several programs in which larp is used as a medium to improve social skills, among other things, but empirical quantitative verification is still lacking (Geneuss 2019, 88-95). This is also and especially true for therapeutic applications.

In cognitive behavioral therapy (CBT), which is one of the most widespread therapeutic approaches, role-play is an important tool for developing desired target behavior (Fliegel 2020). This also applies to so-called skills groups in CBT. One form of these skills groups is the *Gruppentraining sozialer Kompetenzen* (group training of social skills, GSK) (Hinsch and Pfingsten 2015).

Some literature has highlighted the similarities between role-playing methods used in CBT- oriented skills groups like GSK and larp (Balzer 2008; Aschenbrenner 2013). Jensen (2022) has presented empirical evidence of larp for increasing social skills in human resource development. Of particular note is a program described by Fein (2015, 2018) in which young people with autism spectrum disorder experience social skills enhancement through larp.

However, these publications remain predominantly theoretical or descriptive in nature and do not make empirical claims about the effectiveness of larp as a method.

1.1.1 TTRPGs and Psychotherapy

For the related medium of so-called *tabletop role-playing games* (TTRPGs), there is already somewhat more literature showing the effects of recreational role-playing on mental health (Arenas et al. 2022). TTRPGs, unlike larp, take place at a table and a shared story is told. Participants are usually not in costume and put themselves in their roles using only minor tools (for example, a game board and game pieces).

At their core, however, both types of role-playing game are very similar. In both types of game, participants create a PC and then interact with each other and with NPCs. In both cases, there is a GM who runs the game and interacts with the PCs. For this study, the following feature is particularly important: in both larp and TTRPG, PCs can try out a completely new behavior without it having any real consequences for their everyday life.

However, as described above, the academic discourse on psychological benefits of TTRPGs is more advanced than on larp. There is an active community of researchers and practitioners who have been working on the implementation of therapeutic TTRPGs for several years (Atanasio 2020; Connell et al. 2020). Manuals have also recently been published on the therapeutic use of TTRPGs (Connell et al. 2023; Kilmer et al. 2023) in this environment. Several scientific articles have presented the potential of TTRPGs for mental health (Baker et al. 2022), documented their feasibility (Abbott 2021, Rosselet and Stauffer 2013) or provided first empirical evidence that TTRPGs have a positive impact on mental well-being (Lehto 2021). And in a recent study, Varrette et al. (2022) presented for the first time a peer-reviewed, quantitative study demonstrating the effectiveness of a CBT-oriented TTRPG on improving social anxiety.

Because of the strong similarities between TTRPG and larp, research and development on therapeutic larp can benefit from TTRPGs in several ways. First, here are already structured manuals for conducting therapeutic TTRPG, which a therapeutic larp can be modelled on. Second, the first studies on the feasibility and effectiveness of psychologically helpful TTRPG show good results. Replication studies with a similar design could take place here for therapeutic larp.

Finally, some of the efficacy factors already discussed in the literature for TTRPG are likely to apply to larp because of the structural similarity. These factors include, for example:

1. Testing and reinforcing new, helpful behavior (Varrette et al. 2022). Reinforcement in the context of *operant conditioning* is a core element of CBT (Staddon and Cerutti 2003).

2. The ability to look at oneself "from the outside" and take over the perspective of others (*mentalization*) likely to be trained in the RPG (Lukka 2013). A deficit in mentalization seems to correlate with mental health problems (Larmo 2010); therefore perspective taking is practised in established CBT skills groups (Laugeson and Park 2014).

3. "The intentional blending of CBT with TTRPGs allows players to experience role-play exposure situations in a low-risk environment" (Varette et al. 2022, 2). Balzer (2008) and Cierjacks (2002) emphasise that in larp (as a therapeutic method), too, one of the main factors of success could be the testing of new behaviour in a *sanction-free space*.

4. A prerequisite for the therapeutic effectiveness of RPG in general is that there is also a transfer of everyday life from the experiences in the role-play to real life. This spillover effect is also called the *bleed effect* and has been reasonably well studied (Bowman 2013). Such an effect is more likely with careful debriefing (Diakolambrianou 2020). CBT is characterised by highly structured preparation and follow-up of interventions to ensure transfer to everyday life.

In summary, taking the literature on TTRPG and mental well-being as a starting point, it is at least theoretically possible to assume that a CBT-oriented larp can provide transferable positive psychological effects to real life.

1.1.2 Larp in Psychotherapy: Possible Applications

In contrast to TTRPG, however, larp also involves ongoing physical activation. This could also have a positive impact on the success of the therapy. First, physical activation is an effective intervention especially for depressive disorders (Ledochowski et al. 2017). Second, the simultaneous activation of cognitive, emotional, physiological, and behavioral levels is particularly conducive to potentially new learning experiences in larp (Cierjacks 2002, 21). These four levels are also addressed in CBT to alleviate mental disorders (McManus 2022). In CBT, larp could therefore be a particularly suitable method for increasing social competence, as the literature mentioned so far shows.

An improvement in social competence has a positive effect on interpersonal problems. Interpersonal deficits are in turn a core problem in many mental disorders (Segrin 2001) such as depression (Huprich et al. 2016) and social anxiety (Tonge et al. 2020).

Specifically, problems with social skills can, for example, lead to people being more lonely and having fewer social contacts as a resource, so that stressful life events are more likely to lead to depression than in people with larger social support networks (Segrin and Flora 2000). Also, people with adequate social skills can manage interactions with others effectively and more often with positive outcomes (Segrin and Flora 2000). Specifically, this means, for example, being better able to stand up for one's own needs (Hinsch and Pfingsten 2015, 26). The frustration of needs can in turn lead to depression (Pietrek et al. 2022). The extent to which social competence deficits have an explicit influence on social anxiety is not clearly proven, but the subjective perception as socially incompetent leads to avoidance of social situations and can thus promote a social anxiety disorder (Kolbeck and Maß 2009).

For these reasons, improved social skills could also reduce depressive symptoms and social anxiety. The CBT-oriented larp presented here offers the possibility to modify desired behavior in general. For example, a participant in CBT larp can concretely increase self-efficacy (Maddux and Meier 1995), increase self-esteem (Huprich et al. 2016), or stand up better for one's own needs (Hinsch and Pfingsten 2016, Pietrek et al. 2022), which in each case can reduce depressive symptoms (see the literature behind each term).

Another disorder that correlates with social skills deficits and social skills experiences is Internet addiction (Leménager et al. 2018). This is the first reason why a CBT-oriented larp with a focus on social skills could also help with Internet addiction. Secondly, fantasy larp could be particularly suitable for reaching individuals with Internet addiction, especially in cases of addiction of so-called massively multiplayer online role- playing games (MMORPGs). Wölfling et al. (2019) describe that individuals with Internet addiction have particular motivational problems for therapy. MMORPGs and larp are similar in content (Tychsen 2006), which is why larp as a method could facilitate an attractive, low-threshold entry into psychotherapy for people who would otherwise not do therapy.

Last, the author of this study had the impression from an unpublished preliminary evaluation conducted internally that personality accentuations (or disorders) may have a negative impact on larp effectiveness. This is due to the fact that certain personality disorders are subject to particularly negative cognitive evaluations, which may diminish one's perceived success in a therapeutic larp. However, this is only a practical observation.

1.2 Research desideratum

To my knowledge, there is no empirical study to date that examines the practical feasibility of a CBT-oriented therapeutic larp and its impact on patients using qualitative questionnaires and scientific clinical screening questionnaires simultaneously. Empirical studies are lacking in the therapeutic and educational larp fields (Geneuss 2019, 88-95).

The author of this study has developed a standardized program to achieve specific psychotherapeutic goals during a one-day larp. This therapeutic larp is CBT-oriented. The feasibility of the therapeutic larp was first tested in an unpublished preliminary evaluation, which, however, was only carried out with mentally healthy participants. The present study aims to 1. show the feasibility of a CBT-oriented larp with mentally ill participants and 2. examine whether participation in this therapeutic larp can also be reflected in clinical screening questionnaires on the basis of six individual clinical cases. A pre-post follow-up design was chosen for this purpose. The screening questionnaires are presented in more detail under 2.2 Data collection.

2. METHODS

The conduct of this study received a positive ethics vote from the Ethics Committee II of the University of Mannheim and is registered there under no. 2021-668. All requirements of the ethics vote were met in the conduct and evaluation of the study. Written and verbal informed consent was obtained from participants.

2.1 Presentation of the participants

Participants for this case series were addressed through advertising on social media and in the local press. To participate, the following criteria had to be met:

- The participant had to have a current mental diagnosis or at least a suspected diagnosis from the ICD-10 (Chapter V). Contraindications to therapeutic larp were excluded (see 2.5). These data were confirmed by the study investigator at the first contact before the preparatory interview by asking for symptoms and via written self-statement.
- The participant should be in a currently ongoing therapy or comparable supportive measure, because the therapeutic larp is intended to be only an adjuvant component of a larger psychotherapy.
- The participant should be a maximum of 30 years old and preferably have a rather high Internet consumption (however, this was not a mandatory criterion for participation).

In the following, the participants are introduced with a pseudonym in order to ensure their anonymity:

Participant 1 was *Riley*, a 25-year-old woman. She lived in assisted living for people with mental illness. In this residential facility, she lived everyday life as self-organized as possible. However, there was regular contact and support from professionals, such as social workers.

Riley did not have a partnership at the time of the study. However, she felt stable compared to earlier years and was happy to finally go to work regularly, in a print shop that belonged to the same organization as the residential facility. In everyday life, Riley found it particularly difficult to distance herself and say "no." She attributed this biographically to the fact that her sister had been very angry and resentful if Riley had ever said "no" in childhood and adolescence (dysfunctional relationship scheme, which is maintained by avoidance nowadays).

Riley had a total of six inpatient treatments between 2016 and 2021 with a behavioral therapy focus and also dialectical behavioral therapy (*DBT*). The still-current treatment diagnoses were: Recurrent depression, Borderline personality disorder, and ADHD. Related to these disorders, she was taking medikinet, fluoxetine, and dominal. The initial treatments had still been predominantly about her psychological stabilization. In the inpatient behavioral therapy in 2019, a sufficient adjustment with the above-mentioned medications had then taken place. It was also important that she was able to develop the perspective of living in an assisted living group in the future during this stay. In behavioral therapy 2021, the focus was then on learning skills (for emotion regulation). She had practiced dealing with trauma-associated dissociations. And work had begun on her past. At the time of the preliminary interview for the larp intervention (t_0), the following symptoms persisted: reduced sense of self-worth ("self-hatred"), severely reduced self-confidence, insecurity in several (including social) situations, problems with regulating emotions, and difficulty with allowing emotions. She also found it very difficult to accept when she made mistakes. In addition, she stated that she still had unprocessed traumatic experiences, but that they did not currently trigger any symptoms.

Participant 2, *Robin*, was 26 years old, nonbinary gender, and also worked in a print shop with the goal of vocational rehabilitation. They also lived in assisted living, due to several pre-existing mental health conditions. They did not have a partner. As a biographical origin for their current mental health problems, they stated that they had a long history of bullying experiences and had been psychologically abused by their older brother. At the time of the

study, Robin nevertheless felt that they were making progress in their personal development and they felt stable overall. This was mainly due to the fact that further steps towards a more independent life were planned in the near future: Attending a boarding school and enrolling in a vocational training center. Between 2011 and 2020, they had attended a total of six psychotherapies (outpatient and inpatient). The main diagnoses were depression and borderline personality disorder. An older previous diagnosis was social phobia. Currently, an ADHD diagnosis was still ongoing. They believed that they had not received the correct diagnosis and had therefore been wrongly treated. They did not take psychotropic drugs. Robin had had a first stay in child and adolescent psychiatry in 2011. This was followed by inpatient behavioral therapies in 2016 and 2019, combined with DBT. In addition, they underwent a total of three partial inpatient behavioral therapies in a day clinic in 2017, 2019, and 2020. They still use the strategies they learned in everyday life today. Symptom areas that could not be solved sufficiently so far were emotion regulation and perceiving emotions; they avoided the perception of emotions as a maladaptive strategy as a result of learning experiences of bullying and abuse. In addition, low self-esteem was stressful for Robin ("self-hatred").

Participant 3, *Liam*, was a 29-year-old educator, male, who was in a partnership but lived alone in his apartment. He said that one behavioral problem that came from his biography was that he always subordinated his needs to those of other group members (e.g., at work). He explained this by saying that as a child he only got attention when he was "sweet and conformed" (development of a dysfunctional relationship schema). He had been in outpatient behavioral therapy (weekly, individual) for 4 months at the time of study entry. The treatment diagnoses were depression and ADHD. As part of the ADHD, Liam also reported intermittent excessive Internet use. Liam was taking methylphenidate. Liam stated in the course of current behavioral therapy did he receive sufficient help because of this. He explained learning to "come clean with himself" and build resilience in psychotherapy. As a result of the methylphenidate, he had experienced an increase in drive and better concentration, and he was able to perform better. However, he still had strong problems regarding self-doubt and self-organization. He also stated that he usually subordinated his own needs to those of others (result of the dysfunctional relationship scheme).

Participant 4 was *Mia*, a 26-year-old social pedagogical assistant. She lived together with her partner. Mia was born abroad and lived with her mother and her mother's family at first. There was no contact with the father. Mia's childhood was characterized by having a bad relationship with her stepfather and the new family in which she lived with her mother. She had already undergone outpatient behavioral therapy in adolescence as well as a hospital stay and was currently undergoing behavioral therapy again (for about 1.5 years at the start of the study, about every 14 days, individual setting). Treatment diagnoses were depression and ADHD. She was taking escitalopram for the depression. She had also taken methylphenidate in the past. Mia had already been dealing with depression in her initial therapies. These persisted at the time of the study, and she described the depression as "up and down." In addition, she had developed some behavioral compulsions. The ADHD had improved over the course of therapy, but the depression and compulsions described had not yet improved significantly.

Participant 5, *Quinn*, was a 22-year-old female warehouse logistics specialist. Quinn lived in an apartment with her partner. She explained that she found it difficult to approach people and be open because of her fears of being rejected. On the one hand, these had arisen because of bullying experiences at school. On the other hand, she had lived in foster care during her childhood and she also attributed her social anxiety to the unfavorable behavior of her foster parents. She was the only participant who had not had ongoing psychotherapy or comparable supportive care, but had only had individual medical appointments in the past for psychological complaints. Fears of rejection were also the main psychological complaint at the time of the study.

Participant 6, *Emma*, was a 30-year-old female doctoral student and single. Biographically, she attributed her problems in the area of saying "no" to the fact that her parents had not taken enough responsibility in the past. As a result, Emma had developed a great enthusiasm for many things, was very impulsive, but also felt "responsible for everything." She attributed her difficulties in making decisions to her perfectionism. This would come from an old biographical core belief: "I have to do everything right to be accepted." She attributed her time management problems to ADHD. She schedules too little time for individual activities and jumps back and forth a lot on tasks. Emma explained about the current life situation that she currently has a lot of stress and unfinished projects at work. Due to the Corona pandemic, she had to be isolated for a long time because of an immune deficiency. Because of this -- and the fact that she had moved -- she had experienced a lot of loneliness in the previous months. She had undergone four therapies in the past: inpatient behavioral therapy twice (2007 and 2008), outpatient behavioral therapy from 2008 to 2012, and outpatient behavioral therapy from 2018 to 2019. The treatment diagnoses were PTSD and adjustment disorder. In addition, she had ADHD. She was taking methylphenidate and she saw her doctor regularly for medication. Emma had experienced improvement in her impulse control, particularly with the methylphenidate, and in emotion regulation. Ongoing difficulties were: Self-organization, excessive perfectionism, difficulty saying "no," fear of loss, and difficulty making decisions.

2.2 Data Collection

Data collection for the study took place at the same time as a preliminary interview for the therapeutic larp. From now on, this data collection point is called t_0 and took place 2 months before the larp. The preparation contents mentioned at the beginning were summarized for this study and a longer preparation interview took place. This was done with the help of a self-designed worksheet. The author moderated the preparatory talk. He will be referred to as the *therapist* from now on because he was the main therapeutic contact for the participants. How the preparatory talk proceeded in terms of content will be explained under point 2.5.

2.3 Implementation of larp therapy

Following the preparatory interview, the questionnaires described below were distributed. First, a questionnaire on qualitative data: This included demographic data; history of mental illness and prior treatment; information on current core mental health problems; and biographical background of the mental disorder. Participants' current living arrangements were also inquired about. In addition, participants were asked if they had experience with recreational role-playing.

In addition, five established screening questionnaires were completed, which can provide indications of mental health problems and disorders. As explained at the beginning, from a theoretical point of view, the therapeutic larp could be helpful for several disorders, which is why these specific screening questionnaires were selected:

- *Fragebogen zu sozialer Angst und sozialen Kompetenzdefiziten: SASKO* (a German screening for social anxiety) (Kolbeck and Maß 2009);
- *Beck-Depression Inventory Revision* (*BDI-II*) (German edition by Hautzinger et al. 2007): for the assessment of depressive stress;
- *Brief Symptom Inventory* (*BSI*) (German edition by Franke 2002): for assessing overall psychological distress across multiple symptom domains;
- *Personality Disorder Screening Short Form* (*PSS-K*) (a German 8-item screening for personality disorders) (Schöttke et al. 2011): to collect evidence of personality disorders and accentuations, which as mentioned may play a role based on our internal preliminary evaluation; and
- *Skala zum Onlinesuchtverhalten bei Erwachsenen* (*OSVe-S*) (a German screening for addictive behavior concerning the Internet) (Wölfling et al 2010): to assess possible pathological Internet use.

All participants completed these questionnaires as paper-pencil versions independently for the first time after the preparatory interview.

In the following, the results of this survey at t_0 are presented in table form for a better overview. The scores that are meaningful according to the test manual are presented in each case. For the individual tests, the characteristic values are described below, which provide indications of psychological stress or illnesses. Two important test quality criteria -- reliability and construct validity -- are also reported here.

SASKO (Kolbeck and Maß 2009): A global T-value is reported, based on a norm sample (for adults). Minimum T= 20, maximum T= 80. It is common to assume the following interpretation for T-values: <40: below average, 40 to 59: average, 60-69: slightly above average, 70-79: strongly above average, ≥80: extremely above average. T-values above 59 are therefore conspicuous in the sense of the test and may be clinically relevant. In the SASKO there are also four subscales that can be considered individually. For these, a cutoff scale is given in the manual to see whether a scale is clinically relevantly elevated. The subscales are called (cutoff scores in brackets behind them) *fear of talking and being the focus of attention* (15), *fear of rejection* (13), *interaction deficits* (10) and *information-processing deficits* (9). The reliability of the SASKO can be rated as good overall, although the empirical validation of the reliability was only carried out with a mentally healthy sample (Kolbeck and Maß 2009). The construct validity is in the acceptable to good range (Kolbeck and Maß 2009).

BDI-II (Hautzinger et al. 2007): A sum score is reported. There are the following cutoffs: 0-9: indicates no or minimal depression. 10-18: indicates mild depression. 19-29: indicates moderate depression. 30-63: indicates severe depression. BDI-II (German version) shows good construct validity and reliability (Kuehner et al. 2007).

BSI (Franke 2002): A global T-score is reported, based on a norm sample (for adults), called *T(GSI)*. The interpretation of the T-value is the same as for the SASKO. Above-average values indicate a clinically relevant overall mental stress. The reliability of the BSI's global scale GSI used here is high in the empirical evaluation, a meaningful empirical evaluation of

construct validity is not yet available for the German version (Franke 2002). Nevertheless, it is a standard screening method used in practice.

PSS-K (Schöttke et al. 2011): A sum score is calculated. Minimum= 0, maximum= 16. A sum score ≥ 4 gives a first indication of a possible personality disorder. For 8 different personality disorders (sensu DSM-IV or ICD-10), values between 0 and 2 can be achieved in each case. In the case of the PSS-K, it is particularly important to emphasise that the screening only gives a very first indication of a personality disorder and that a much more extensive diagnostic procedure would be necessary to make a diagnosis. In the empirical evaluation, the PSS-K shows good construct validity and sufficient reliability (Schöttke et al. 2011).

OSVe-S (Wölfling et al 2010): A sum score is formed. Minimum: 0, maximum: 27. Score ≥ 7 indicates abusive Internet use, score ≥ 13.5 indicates Internet addiction. There are only a small number of evaluation studies to date, but these show good reliability and (construct) validity of the OSVe-S (Mößle et al. 2014, 33-58).

2.4 Participants' Data at Baseline t_0

In the following tables, values that indicate clinically relevant exposure are marked with * for all questionnaires. For the SASKO, all subscales are also presented in tabular form, as this is particularly relevant for the present study for the theoretical reasons mentioned. However, the raw scores are shown here, as these are usually used to assess a possible disorder.

2.4.1 Riley

Table 1: Screening results from Riley at t_0

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
Score	78*	25*	72*	9*	7.5*

Screening results from Riley at t_0. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 2: SASKO subscales from Riley at t_0

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	24*	22*	13*	13*

Results of the four subscales of SASKO from Riley at t_0: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

Rileys' PSS-K revealed indication of a possible dependent, paranoid, or schizotypal type personality disorder. Riley's scores on the subscales of the SASKO indicated manifest social phobia. These are the Speech and Midpoint Anxiety and Fear of Rejection subscales; as soon as a cutoff is exceeded in any of the scales, this is an indication from social phobia. The subscales indicating a subjective limitation of social competence also had values above the cutoff. These are the subscales Interaction Deficits and Information Processing Deficits.

2.4.2 Robin

Table 3: Screening results from Robin at t_0

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
Score	72*	22*	71*	9*	6

Screening results from Robin at t_0. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 4: SASKO subscales from Robin at t_0

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	19*	19*	12*	13*

Results of the four subscales of SASKO from Robin at t_0: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Robin's responses indicated a possible dependent, paranoid, or schizotypal type personality disorder. Robin's scores on the subscales of the SASKO indicated manifest social phobia. The subscales indicating a subjective limitation of social competence also showed scores above the cutoff.

2.4.3 Liam

Table 5: Screening results from Liam at t_0

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
Score	67*	16*	70*	11*	10.5*

Screening results from Liam at t_0. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 6: SASKO subscales from Liam at t_0

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	12	18*	14*	10*

Results of the four subscales of SASKO from Liam at t_0: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Liam's responses indicated a possible personality disorder of the histrionic, borderline, or obsessive-compulsive type. In Liam's SASKO the score in one subscale (Reject.) indicated manifest social phobia. The subscales indicating a subjective limitation of social competence also showed values above the cutoff.

2.4.4 Mia

Table 7: Screening results from Mia at t_0

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	74*	20*	72*	8*	7*

Screening results from Mia at t_0. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 8: SASKO subscales from Mia at t_0

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	22*	16*	15*	14*

Results of the four subscales of SASKO from Mia at t_0: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Mia's responses indicated a possible personality disorder of the histrionic and obsessive-compulsive type. Mia's scores on the subscales of the SASKO indicated manifest social phobia. The subscales indicating a subjective limitation of social competence also showed scores above the cutoff.

2.4.5 Quinn

Table 9: Screening results from Quinn at t_0

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	69*	11*	74*	10*	5

Screening results from Quinn at t_0. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 10: SASKO subscales from Quinn at t_0

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	21*	13*	10*	13*

Results of the four subscales of SASKO from Quinn at t_0: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Quinn's responses indicated a possible personality disorder of the dependent, histrionic, and paranoid type. Quinn's scores on the subscales of the SASKO indicated manifest social phobia. The subscales indicating a subjective limitation of social competence also showed scores above the cutoff.

2.4.6 Emma

Table 11: Screening results from Emma at t_0

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	51	8	59	3	1.5

Screening results from Emma at t_0. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 12: SASKO subscales from Emma at t_0

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	11	8	2	8

Results of the four subscales of SASKO from Emma at t_0: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

2.5 Rationale for Treatment

Looking at the participants' medical history and questionnaire results, it appears that all participants appeared suitable for the larp intervention. Five of the six participants had scores on at least one screening questionnaire each that indicated a manifest mental disorder. One exception was Emma. However, she had a persistent diagnosis (ADHD) and reported significant distress and functional impairment. In her case, this concerned, for example, the social skills of saying "no" and accepting one's own mistakes in social situations. Emma did not have critical scores in the screenings, but she described conspicuous social skills deficits that made her a suitable participant for the larp intervention.

Social (competence) deficits were demonstrated by the screenings in all participants except Emma, for which the therapeutic larp as described seems particularly appropriate. In addition, all participants described current or anamnestic depressive problems and in all of them (except Emma) these could be validated in the questionnaires. This was already an indication that the participants would also train certain aspects of social competence in the therapeutic larp, for which the larp seems particularly suitable as described.

Conceptually, the therapeutic larp training described here comprises several sections (Bartenstein 2022c):

- Problem analysis and goal setting, explaining the rational of therapeutic role-play, test run;
- Communication of the concept: larp and larp therapy, creating a larp character;
- (Organizational) preparation of the game;
- Implementation of the game unit (300 minutes);
- Reflection and everyday transfer; and
- Checking target achievement, planning further transfers.

The preparatory interview took place as a group. Contraindications for the therapeutic larp were defined in advance by the author: acute psychosis, acute suicidality, advanced dementia, or acute substance intoxication. None of these were present in the participants. They also had to be physically healthy enough for a long walk in the woods.

All participants had therapy experience and were currently in psychotherapeutic or similar treatment. Quinn was an exception. She was included in the case series to make an exploratory comparison: Is therapeutic larp effective without adjunctive psychotherapy?

2.6 Implementation of larp therapy

2.6.1 Preparatory talk

At the beginning of the preparatory talk, all participants were told that they could still discuss sensitive issues privately with the therapist at the end of this session, in order to reduce avoidance due to shame or fear.

During the preparatory talk the therapist first explained therapeutic role-play and then the concept of therapeutic larp. The first point on the preparation sheet is the problem analysis in the group. The therapist worked out with the participants in the problem analysis which situations were difficult for the participants in everyday life and where they wanted to change something. In the second step, 1 to 3 behavioral goals were worked out for the therapeutic larp. For example, if a participant wrote in the 1st step, "It's hard for me to say no," then in the 2nd step a goal could be, "I want to say no in larp when I don't want something." In addition, possible obstacles to implementation were formulated. The last point for the worksheet was a trigger analysis, e.g., what participants do not want to experience.

Then, a larp character was developed with the participants that fit their behavioral goals. A self-developed worksheet with typical fantasy larp characters was used to support this. These "archetypes" were loosely based on the archetypes of C.G. Jung (2001).

After the preparatory talk, the first measurement (the baseline t_0) using clinical screening questionnaires took place.

The participants were then tasked with taking a closer look at their character over the next few weeks, coming up with a short backstory and getting props for the game.

2.6.2 Implementation of the therapeutic larp

About six weeks after the preparatory meeting, the actual therapeutic larp took place in a forest. The therapist as well as four co-therapists played the NPCs and were available as contact persons for the participants. The therapist was the only one accompanying the group the entire time and provided support to the participants to implement their behavioral goals. All co-therapists had experience with CBT larp from a previous implementation and they

were well informed about the participants and their goals.

A short briefing session was held at the beginning, during which rules and goals of the larp were reiterated by the therapist. The therapeutic larp took place at several stations where the co-therapists were waiting with tasks that claimed different aspects of social skills. The therapeutic larp is described in more detail elsewhere (Bartenstein 2022a, 2022b), which is why it is omitted here.

Participants predominantly had to take the initiative themselves to try out their behavioral goals within the larp. When participants were more passive, the therapist and co-therapists attempted to actively engage participants in the game. Overall, all participants successfully and actively interacted with each other and the co-therapists on several occasions. Thus, activation of at least one behavioral goal occurred for all participants. After just under five hours, the larp was completed.

A debriefing then took place. A structured, guided debriefing is important from a theoretical perspective, 1) for a potential spillover effect (Diakoulambriano 2020) and 2) for mental hygiene in general (Bowman 2014).

This final round was designed similarly to a behavioral therapy group session. The therapist and co-therapists provided feedback to participants on how they perceived them in larp.

Participants also provided feedback to each other and each participant reported on their experiences in the larp. This was already recorded in writing by the therapist on site during the debriefing.

Participants were encouraged to continue to engage with larp as a health-promoting method in the future. They then filled out an initial evaluation form regarding the achievement of goals and other experiences they had made in larp.

2.7 Results of the first written evaluation (t_1) and protocol

During the final round, the participants filled out an initial short evaluation form. This related to the participants' own perception of the game and the extent to which they considered their own goals to have been achieved. They could tick points from 1 ("not at all") to 6 ("completely"). Participants were also asked to comment in free text form. These are presented below. In addition, excerpts from the minutes taken during the final round about statements made by the participants are presented below.

Riley stated that she was able to implement her behavioral goals in larp to the following degree: Goal 1: 2/6, Goal 2: 3/6, Goal 3: 1/6. She wrote in response, "I thought everything was good except my own implementation."

Robin stated that they were able to implement their behavioral goals in the larp to the following extent: Goal 1: 4/6, Goal 2: 3/6, Goal 3: 5/6. They wrote: "The whole thing was a lot of fun! The puzzles were good and not too hard." They added verbally that it had been very important for them to get support from the therapist in the game when implementing the goals.

Liam stated that he had been able to implement his behavioral goals in the larp to the following extent: Goal 1: 5/6. He wrote that he positively evaluated the following: "The group dynamic, the structuring of the larp and the constant supervision by the therapist, as well as the players and supervisors being together."

Mia stated that she had been able to implement her behavioral goals in larp to the following extent: Goal 1: 5/6. She explained that it took time for her to arrive in her role, but

then went well. The larp had been a positive physical activation for her, and she was now positively exhausted.

Quinn stated that she had been able to implement her behavioral goals in larp to the following extent: Goal 1: 4/6, Goal 2: 5/6. She stated that she also found it difficult to get into character. However, she was very happy to have jumped over her shadow and tried it out.

Emma stated that she was able to implement her behavioral goals in larp to the following degree: Goal 1: 3/6, Goal 2: 5/6. She wrote: "Positive: 1. it was easy for us to get into the role, 2. the quests have a good level of difficulty, 3. great organization. Suggestions for improvement: 1. More role-play on quests achieved, 2. possibly repeat objectives and role again before playing, possibly in a separate meeting beforehand." She added verbally that it had been difficult for her to act out behavioral objectives with which she acted "against the group."

2.8 Follow-up Measurements

No further follow-up interventions took place. The participants were offered to contact the study leaders at any time to discuss their experiences in the following months. Liam and Mia made use of this offer.

Two follow-up measurements with the questionnaires already described took place (1. after two weeks, 2. after three months). In the following, only the main characteristics of the respective screenings are given in the tables (e.g., the total sums of the results) as well as the subscores of the SASKO. If there was a relevant change compared to t_0 (i.e. a score fell below a cutoff), this is also reported here in the continuous text for a better overview. Correspondingly results of subscales are reported only in case of relevant changes compared to previous surveys.

t_2: **Two Weeks Posttreatment.** After the larp, the participants received the same paper-pencil questionnaires by mail that they had filled out before the larp. The qualitative questionnaire was not included again. Instead, a similar evaluation questionnaire to the one that the participants had filled out directly after the larp was now also given out again. There were 4 multiple choice questions:

1. In the past week I was able to successfully continue my goals (a, b, c) from the larp;
2. In everyday life I make myself aware of my larp character and its behavior;
3. I remember the larp as positive; and
4. I still benefit from the larp.

All questions could again be answered on a 6-point Likert scale from "not at all" to "fully." In addition, a free text field asked for further explanation of item 4 or other comments.

Participants completed the questionnaires two weeks after larp and returned them by mail. Below are the results of this measurement point, which from now on will be called t_2.

2.8.1 Riley

Table 13: Screening results from Riley at t_2

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
Score	73*	22*	61*	12*	3

Screening results from Riley at t_2. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 14: SASKO subscales from Riley at t_2

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	23*	20*	10*	11*

Results of the four subscales of SASKO from Riley at t_2: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Riley's responses at t_2 indicated a possible personality disorder of the dependent, histrionic, borderline, paranoid, or schizotypal type. The OSVe-S indicates decreased Internet use, which is now in the normal range, as opposed to the previously existing abusive use. In her evaluation form, Riley stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 2/6, Goal 2: 4/6, Goal 3: 3/6. She was not able to bring much awareness to her character's behavior in everyday life: 2/6. She remembered the larp as positive: 5/6. However, she hardly benefited from it anymore: 2/6. In this regard, she wrote: "The larp itself was very good, but I have been dissatisfied with my performance."

2.8.2 Robin

Table 15: Screening results from Robin at t_2

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	73*	16*	61*	12*	4.5

Screening results from Robin at t_2. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 16: SASKO subscales from Robin at t_2

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	22*	20*	13*	12*

Results of the four subscales of SASKO from Robin at t₂: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

The BDI-II score at t_2 indicates mild depression (previously there was evidence of a moderate-severe episode). On the PSS-K, Riley's responses at t_2 yielded evidence of a possible dependent or schizotypal type personality disorder.

In their evaluation form, Robin stated about their therapy goals that they were able to continue their goals to the following extent: Goal 1: 4/6, Goal 2: 5/6, Goal 3: 4/6. In everyday life, they sometimes made themselves aware of the behavior of their larp character: 3/6. They remembered the larp as consistently positive: 6/6. They also still benefited from it (4/6) and described this as, "Every now and then I try to think of my goals from the larp, but don't always quite work out. But when I think about them, I can usually make them happen."

2.8.3 Liam

Table 17: Screening results from Liam at t₂

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
Score	66*	9*	67*	5*	7*

Screening results from Liam at t₂. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 18: SASKO subscales from Liam at t₂

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	17*	14*	10*	11*

Results of the four subscales of SASKO from Liam at t₂: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

The BDI-II indicates now minimal depression (previously there was evidence of a mild episode). In the PSS-K, Liam's responses at t_2 revealed no more evidence of specific personality disorders. The sum score was 5.

In his evaluation form, Liam stated about his therapy goals that he was able to continue his goals to the following extent: Goal 1: 4/6. In everyday life, he sometimes made himself aware of his larp character's behavior: 4/6. He remembered the larp as consistently positive: 6/6. He still benefited fully from it (6/6), describing it this way: "I already jumped over my shadow when I got there, because I preferred to step back. I didn't prepare myself and was still perceived as very positive."

2.8.4 Mia

Table 19: Screening results from Mia at t_2

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	63*	20*	67*	11*	4

Screening results from Mia at t_2. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 20: SASKO subscales from Mia at t_2

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	13	14*	9	11*

Results of the four subscales of SASKO from Mia at t_2: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Mia's responses at t_2 indicated a possible personality disorder of the dependent, histrionic, paranoid, schizotypal, or obsessive-compulsive type. In the OSVe-S, Mia had now a sum score of 4, in contrast to t_0 (7= abusive use). In her evaluation form, Mia stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 4/6. In everyday life, she was not at all aware of her larp character's behavior: 1/6. She remembered the larp as consistently positive: 6/6. She still benefited quite a bit from it (5/6) and described it this way: "I find that the larp role-play showed me that you also somehow get to the end when you give up control, even if maybe more slowly or through detours. In general, it affected me positively and it was really a lot of fun because in the end it was 'just' a game. I would definitely do it again. The fresh air half the day also did me good and the atmosphere in the forest." She later added verbally that she had felt positively exhausted and "worn out" as she very rarely does otherwise.

2.8.5 Quinn

Table 21: Screening results from Quinn at t_2

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	65*	17*	72*	11*	8*

Screening results from Quinn at t_2. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 22: SASKO subscales from Quinn at t_2

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	18*	13*	8	11*

Results of the four subscales of SASKO from Quinn at t_2: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Quinn's responses at t_2 indicated a possible personality disorder of the dependent, histrionic, paranoid, schizoid, or schizotypal type. In the OSVe-S, Quinn had a sum score of 8, so it was now above the cutoff, in contrast t_0 (5). In her evaluation form, Quinn stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 4/6, Goal 2: 3/6. In everyday life, she was not aware of her larp character's behavior at all: 1/6. She recalled the larp as mostly positive: 5/6. She barely benefited from it (2/6) and described it this way: "Through the larp, I was able to jump over my shadow for a small period of time and step into the role I had set out to play. Therefore, my first experience and impressions of the larp are very positive."

2.8.6 Emma

Table 23: Screening results from Emma at t_2

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	51	10*	52	1	2.5

Screening results from Emma at t_2. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 24: SASKO subscales from Emma at t_2

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	10	9	3	8

Results of the four subscales of SASKO from Emma at t_2: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

Emma's BDI-II score indicated mild depression, in contrast to minimal depression at t_0 (8). In her evaluation form, Emma stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 5/6, Goal 2: 2/6. In everyday life, she was hardly aware of her larp behavior: 2/6. She remembered the larp as all-around positive: 6/6. She still benefited quite a bit from it (4/6), describing it as, "I am more aware of my goals. In everyday life, I notice more when I'm not behaving according to my goals."

2.9 t_3: Three Months Posttreatment

Three months after the larp, the participants received the same questionnaires again by mail. All participants filled them out and then returned them by mail as well. The results are shown again below. In addition, the participants' progressions are shown from t_0 to t_3 with regard to the most important parameters from the questionnaires.

2.9.1 Riley

Table 25: Screening results from Riley at t_3

Screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	73*	13*	58	11*	4.5

Screening results from Riley at t_3. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 26: SASKO subscales from Riley at t_3

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	23*	25*	9	8

Results of the four subscales of SASKO from Riley at t_3: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

Rileys's BDI-II score at t_3 indicated minimal depression (13 points), in contrast to a moderate depression at t_0 (25) and t_2 (22). Her $T(GSI)$= 58 on the BSI was now in an average range, in contrast to scores above the cutoff at t_0 (72) and t_2 (61). On the PSS-K, Riley's responses at t_3 yielded evidence of a possible dependent, histrionic, paranoid, or schizotypal type personality disorder. In the SASKO a change had taken place in the subscales: In contrast to the two previous measurement points, the subscales indicating a social competence deficit --interaction deficits and information processing deficits -- no longer showed elevated values above the cutoff. In her evaluation form, Riley stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 3/6, Goal 2: 4/6, Goal 3: 3/6. In everyday life, she was barely aware of her larp character's behavior: 2/6. She recalled the larp as mostly positive: 5/6. She still benefited moderately from it (3/6), describing it as, "I hope it's from the larp, but I'm starting to feel more confident again. The larp was very interesting and fun.

2.9.2 Robin

Table 27: Screening results from Robin at t_3

screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	72*	15*	66*	7*	4.5

Screening results from Robin at t_3. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 28: SASKO subscales from Robin at t_3

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	23*	17*	10*	13*

Results of the four subscales of SASKO from Robin at t_3: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

In the PSS-K, Robin's responses at t_3 gave evidence of a possible schizotypal-type personality disorder. In her evaluation form, Robin stated about their therapy goals that they were able to continue their goals to the following extent: Goal 1: 5/6, Goal 2: 4/6, Goal 3: 5/6. In everyday life, they sometimes made themselves aware of the behavior of their larp character: 3/6. They remembered the larp as consistently positive: 6/6. They also still benefited from it (4/6) and described this as follows: "Now and then I try to think of my character from the larp and act like it, but it doesn't always work out. Due to the fact that the larp unfortunately only took place once, I forget about the goals and my character more and more often or don't think about it as often. If this would take place more often, on regular dates, it would definitely stay in my head better and I am sure that it could help me really well. The goals would be much more present in my mind."

2.9.3 Liam

Table 29: Screening results from Liam at t_3

screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	63*	25*	72*	11*	8.5*

Screening results from Liam at t_3. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 30: SASKO subscales from Liam at t_3

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	14	12	13*	9*

Results of the four subscales of SASKO from Liam at t_3: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

Liam's BDI-II score at t_3 indicated moderately severe depression. That indicated more depression than at t_0 (16) and t_2 (9). In the PSS-K, Liam's responses at t_3 indicated a possible borderline, histrionic, schizoid, or obsessive-compulsive type personality disorder. A change

had taken place in the subscales of the SASKO: In contrast to the two previous measurement time points, the *fear of rejection* subscale no longer showed an elevated value above the cutoff. This would fit Liam's statement in the evaluation form at t_2 (he had been perceived as positive without preparation at the larp). In his evaluation form, Liam stated about his therapy goals that he was able to continue his goals to the following extent: Goal 1: 2/6. In everyday life, he was hardly aware of his larp character's behavior: 2/6. He remembered the larp as consistently positive: 6/6. He hardly benefited from it anymore (2/6) and described this as, "I remember the larp as positive, but it has nothing to do with my current state. For an effect, maybe a repeat would be helpful."

2.9.4 Mia

Table 31: Screening results from Mia at t_3

screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	59	15*	68*	8*	2

Screening results from Mia at t_3. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 32: SASKO subscales from Mia at t_3

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	13	11	9	8

Results of the four subscales of SASKO from Mia at t_3: Fear of talking and being the focus of attention, fear of rejection, interaction deficits and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

Mia's BDI-II score indicated at t_3 a mild depression and was thus lower than at the previous measurement time points (t_0: 20 and t_2: 20), where moderate depression was still assumed. In the PSS-K, Mia's responses gave evidence of a possible personality disorder of the histrionic or obsessive-compulsive type. In the SASKO Mia's load regarding social anxiety and subjective social competence deficits was within the normal range for the first time in the course of the study. All four subscales were now also below the clinical cutoff. At the previous measurement time point, this was true for only two of the subscales.

In her evaluation form, Mia stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 4/6. In everyday life, she was not at all aware of her larp character's behavior: 1/6. She remembered the larp as consistently positive: 6/6. She no longer benefited from it (1/6) and described it this way: "Unfortunately, I don't think about it in everyday life anymore, but when I think back on it, joy comes."

2.9.5 Quinn

Table 33: Screening results from Quinn at t_3

screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	78*	16*	80*	10*	7*

   Screening results from Quinn at t_3. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 34: SASKO subscales from Quinn at t_3

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	27*	18*	15*	17*

   Results of the four subscales of SASKO from Quinn at t_3: Fear of talking and being the focus of attention, fear of rejection, interaction deficits and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

   Quinn had the result *T(GSI)*= 80 in the *BSI* at t_3. This indicated an extremely above-average psychological stress, which was again above the previous values. The SASKO was also now strongly above average (*T*=78) and previously at t_0 and t_2 only slightly above average. In the PSS-K, Quinn's responses indicated a possible personality disorder of the dependent, histrionic, paranoid, or obsessive-compulsive type. In her evaluation form, Quinn stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 3/6, goal 2: 2/6. In everyday life, she was hardly aware of the behavior of her larp character: 2/6. She remembered the larp as predominantly positive: 5/6. she hardly benefited from it (2/6) and described this as follows: "I think the larp is in itself a super thing to escape from one's everyday life for a considerable time. Personally, I find it very difficult to bring the goals that you have pursued in the larp into reality and your everyday life. I think if you do larp more often, it could possibly be more effective."

2.9.6 Emma

Table 35: Screening results from Emma at t_3

screening	SASKO	BDI-II	BSI	PSS-K	OSVe-S
score	61*	10	59	1	1

   Screening results from Emma at t_3. Sum scores or t-values are reported according to the respective manual. *means: above average value.

Table 36: SASKO subscales from Emma at t_3

SASKO subscale	Talk	Reject.	Interac.	Informat.
score (raw)	11	15*	9	9*

Results of the four subscales of SASKO from Emma at t_3: Fear of talking and being the focus of attention, fear of rejection, interaction deficits, and information-processing deficits. According to the manual, the raw scores are compared with a cutoff. *means: ≥ cutoff.

Emma scored *T(SASKO)=61* at t_3. Thus, for the first time, the stress regarding social anxiety and subjective social competence deficits was slightly above average. In her evaluation form, Emma stated about her therapy goals that she was able to continue her goals to the following extent: Goal 1: 2/6, Goal 2: 4/6. In everyday life, she was not aware of her larp behavior at all: 1/6. She recalled the larp as consistently positive: 6/6. She still benefited greatly from the larp (5/6) and described it this way: "Since the larp, I notice more the situations in everyday life where I am perfectionistic or do not set limits. All in all, I've gotten better at setting boundaries and completing tasks only satisfactorily and not perfectly."

2.10 Difficulties in the Course of Larp Therapy

The first difficulties already arose in the time between the preliminary interview and the larp. Liam and Quinn were no longer sure at this time whether they still wanted to participate. In particular, they stated that they could not sufficiently imagine how the larp would actually proceed. In both cases, the therapist provided more information about this. Liam recognized that his inhibition to participate might be a form of his avoidance behavior and that participation might be therapeutic for that reason as well. He was then motivated to participate again.

Riley and Robin were having difficulty with independent daily structure at the time of larp. Therefore, they were picked up at home by two co-therapists.

One complicating factor on site was the temperatures: it was very hot on the day of the larp, so physical activity was challenging for some of the participants, especially for those who are otherwise not very active in sports. Also, Riley's costume -- a full-body unicorn costume -- made physical activity difficult in the heat. Participants were therefore provided with mineral water by co-therapists during the game.

For all participants it seemed difficult at first to find their way into their own role. With the exception of Emma, who was the only one who already had experience with recreational larp. Robin and Riley in particular found it difficult to act out their rather "offensive" behavioral goals in their role in the game, i.e., clearly standing up for their interests and claiming their rights. The therapist therefore motivated them in between to persevere in this regard. Mia, on the other hand, had the goal of intervening less. The therapist also gave her a tip for this in the game, so that she could implement this better.

In the debriefing of the larp, handouts were distributed on which the everyday transfer of the trained content was explained again and possible side effects were pointed out (e.g., the so- called "post larp depression" in the community, Bowman and Torner 2014). Two participants also took advantage of this, but no one reported any stressful symptoms as a result of the larp.

From the point of view of the therapist and the co-therapists, no complications arose during the implementation. However, the preparation required a very large time commitment.

3. SUMMARY OF THE RESULTS

The results of this case study first show that the therapeutic larp method was perceived as consistently positive by the participants. However, the influence in terms of clinical screening tools varied widely among participants.

First, the participants' assessment of the extent to which they achieved their behavioral goals seems particularly important. Immediately after the larp, all participants indicated that they had achieved at least some of their goals.

In the course of the case study, however, the participants differed greatly in whether they were able to maintain their goals. Riley experienced an upward trend (see Fig. 1), Liam and Quinn experienced a downward trend, Mia experienced a slight downward trend that stagnated, and Emma's goal achievement seemed to develop unsystematically.

Several participants had indicated that a repetition of the larp would have been helpful in consolidating the learned behaviors. This could explain why consolidation of goal achievement did not occur for all participants. A positive reminder of the larp was not enough to maintain goals as well. However, it seemed helpful if participants still felt they benefited from the larp even at t_3: this was true for Robin and Emma. And both had positive development, at least in subgoals.

In the case of Riley, there is also an important observation: she was even able to consolidate her goal achievement over time (Fig. 1); at the same time, symptom relief took place on several scales. This may indicate that she succeeded in transferring the behavioral goals from the larp to everyday life, whereby the intended therapeutic effect was reflected in specific symptom areas. It is noteworthy here that Riley was initially very dissatisfied with her goal achievement, but then seemed to benefit greatly from the larp in the long run (and was able to implement her goals in everyday life, as mentioned). A theoretical explanation could be provided by the research of Leménager et al. (2020): Perhaps the larp leads to participants being confronted with the fact that they are not yet as good at certain behaviors as they thought and are then motivated to work on themselves.

It was assumed that social anxiety and social competence deficits in particular would improve as a result of the larp. This was tested with the SASKO. A decrease of values in the SASKO was observed for Riley, Liam and especially Mia (see Fig. 2). Supplementary, the results of the scale *Uncertainty in Social Contact* from the BSI can be considered. Here, too, these three participants show an improvement compared to the first measurement (see Fig. 3).

Riley and Mia also showed the most remarkable reduction in Internet use between t_0 and t_3, as measured by the OSVe-S (see Fig. 4).

However, Riley, Liam, and Mia indicated in the qualitative follow-up interview that they rarely thought about the larp anymore. Thus, the reduction in psychological distress in the aforementioned screenings is likely to be due to other, external effect factors as well.

With respect to the BDI-II, Riley, Mia, and Robin experienced a decrease in their depressive symptoms (see Fig. 5).

Quinn was the only one to experience a strong increase on several scales. It seems plausible that this is because Quinn was the only one not in therapy at the time of the case series. One might conclude that for significant improvement to occur after therapeutic larp, regular psychotherapy should occur in parallel. The possible additive effect still needs further research.

Summarizing the processes, it can be concluded that the therapeutic larp had positive impact for the participants in the short term. In the qualitative questionnaires, it was characterized as a clearly euthymic experience and the participants were predominantly satisfied with their goal achievement. This could be reflected accordingly in the clinical questionnaires in the follow-up measurement only two weeks later. At the second follow-up after three months, however, the influence of the larp is then apparently no longer so clearly present. On the contrary, it must be noted that several participants had increasing stress values in their screenings. No meaningful causal conclusions can be drawn from the data collected as to why these negative trends can be seen and whether they have anything to do with the larp.

4. DISCUSSION AND RECOMMENDATIONS FOR PRACTICAL IMPLEMENTATION

The present case study has shown that a CBT-oriented larp seems to be suitable in principle as a medium for working with mentally ill people. Therapeutic objectives could be sensibly formulated for the game. The participants were able to prepare themselves well for the game within the framework of a standardized preliminary discussion and were able to try out their target behavior in their roles mostly successfully.

Based on the qualitative data, it was shown that the participants would have liked the larp to be repeated above all else in order to solidify their learning goals. Thus, in the future, the therapeutic larp should best be understood as a training that is repeated over and over again, as is also common in established social skills training.

However, as has been shown, even a one-time implementation resulted in positive experiences for the participants, even after several months. A possible explanation could be that the experience of participating in a larp for the first time had a general effect. Namely, the motivation to engage in novel situations and behaviours, thereby exposing oneself to corrective and psychologically healing experiences. This can have a positive effect on overall mental health. This would also correspond to the personal message that one participant sent to the team of therapists about a year after the larp: she had gained a fundamentally more positive attitude towards life as a result of the larp, and she had her PC printed on a T-shirt to remind herself of it.

For the practice, however, there is the difficulty of economic efficiency here, because the effort of a larp is relatively large and ties up a lot of therapeutic personnel. The format we have chosen (length: one afternoon, forest setting, 4 to 5 therapists) otherwise seems appropriate and sensible in our experience. The number of participants should not exceed 6 in this setting. Our experience as therapists in the larp was that particularly close supervision of the participants during the larp is essential so that they can implement their new behavior.

It also seems important to us that the preparatory and follow-up interviews are conducted very carefully, which is in line with Diakolambrianou (2020), for example. It is probably optimal if psychotherapy runs concomitantly, in which the experiences from the larp can be taken up. This could also explain why Quinn deteriorated in contrast to the other participants.

In conclusion, the results of the study suggest that a CBT-oriented larp can be well implemented as a therapeutic tool to train behavioural goals affecting the symptom domains of anxiety and depression, but this statement relates primarily to qualitative data and practical feasibility. However, no clear, stable effect on symptom reduction (in the sense of screening) can yet be observed from the data. One could draw a benevolent conclusion: At time t_2 we might see a positive influence of the larp (in combination with the qualitative data), at time t_3 no effect at all. Further research is needed here.

In qualitative statements by Mia (t_2) it was emphazised that the physical activation through larp made a positive contribution. This seems to be plausible, because physical activation is an effective intervention, especially for depressive disorders (Ledochowski et al. 2017). But especially walking in the forest as a setting had positive influence in the subjective perception (Mia at t_2). It has been empirically shown that spending time in the forest helps to increase psychological well-being (for an overview see Schuh and Immich 2022, 61-88). Psychotherapeutic interventions, summarised under the term "forest therapy," use the forest as a setting for established treatment components. Particularly noteworthy for a therapeutic larp is a comparative study by Kim et al. (2009), who found that depression patients who regularly received CBT in the forest had significantly better therapy outcomes than patients in hospital. Especially when physically activated outdoors, therapeutic interventions seem to work better, such as in the *walk and talk* approach (Revell and McLeod 2016). From the point of view of the literature, the setting "in the forest" and "in motion" seems to be an additive factor for therapeutic success, but there must still be a targeted therapeutic method as a basis (i.e., the forest alone does not heal). This connection also seems plausible for therapeutic larp. Furthermore, in practical terms, the difference between the outdoor setting and the classical therapy in the therapy office is that new opportunities to solve problems can be directly experienced physically (instead of just talking about them) and that a generalisation of learned skills can take place more easily than if they are only learned in a single setting.

In the present study, participants could develop and train up to three behavioral goals. In retrospect, it seems absolutely sufficient to develop a single behavioral goal in the preliminary interview.

The assumption that personality accentuation reduces the effectiveness of larps could not be confirmed.

In conclusion, the author of this study proposes to introduce a new term to distinguish this particular form of larp from recreational larp (similar to Geneuss 2019, 282): My suggestion is to use the term *T-Larp* for any kind of live-action role-playing that has a therapeutic claim.

5. REFLECTION, LIMITATIONS, AND FURTHER RESEARCH

The present study broke new scientific ground and showed the feasibility of therapeutic larp as a method on the basis of individual cases, especially when a high degree of structuring, preparation, and follow-up takes place.

A significant limitation is the simple study design. The present study was initially only a small case series in pre-post-follow-up design. There was no comparison with a control group (for example, persons without therapy and persons with normal CBT). This means that confounding with external factors is not clear enough in the effects measured by questionnaires in this study. It is also possible that the participants' continued treatment, if any, simply led to an improvement in their symptoms. It seems essential to conduct further quantitative research with more participants and in the form of RCT in the future to investigate the effectiveness of therapeutic larp (see Varette et al. 2022).

In this study, the first data collection (t_0) took place after the preparatory talk. This may have already influenced the screening. Also, the data collected in the group could be biased by the group situation (and participants' shame or fear). Furthermore, in a follow-up study, the mental health data should be better validated, e.g., through doctors' notes. The only data sources used in this study were 1) written self-reports and 2) the investigator's assessment at first contact.

In this article, the role of the therapist (= GM) in therapeutic larp was also not examined in detail with regard to the effect of the larp. Since the therapeutic relationship is always an important effective factor in therapies, this must be specifically investigated in future research.

Finally, for future research, it would also be appropriate if the performing therapists were not also the authors of the study to avoid confirmation bias.

6. ACKNOWLEDGEMENTS

REFERENCES

Abbott, Matthew S., Kimberly A. Stauss, and Allen F. Burnett. 2021. "Table-top Role-playing Games as a Therapeutic Intervention with Adults to Increase Social Connectedness." *Social Work with Groups 45*, no. 1 (16-21).

Arenas, Daniel Lucas, Anna Viduani, and Renata Brasil Araujo. 2022. "Therapeutic Use of Role-Playing Game (RPG) in Mental Health: A Scoping Review." *Simulation and Gaming*, 53(3): 285–311. https://doi.org/10.1177/10468781211073720

Aschenbrenner, Franz. 2013. "Der Nutzen von Live-Rollenspielen für die Soziale Arbeit." Unpublished bachelor thesis, University of Applied Sciences Coburg.

Atanasio, Joseph F. 2020. "Why Older Adventurers Can Beat a Lich: How Dungeons and Dragons Empowers Older Adults." In *Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy*, edited by Anthony M. Bean, Emory S. Daniel Jr., Sarah A. Hays, 109-125. Fort Worth, TX, USA: Leyline Publishing.

Balzer, Myriel. 2008. "Live Action Role-playing. Die Entwicklung realer Kompetenzen in virtuellen Welten." Marburg: Tectum.

Bartenstein, Lennart. 2022a. "Larp in Cognitive Behavioral Therapy: Making Larp a Standard Method." Nordiclarp.org, April 22.

Bartenstein, Lennart. 2022b. "Therapeutisches Abenteuer-Con. Live-Rollenspiel in der Psychotherapie." *LARPzeit* 76, 31-35.

Bartenstein, Lennart. 2022c. "Larp in Cognitive Behavioral Psychotherapy (CBT)." Video poster presented at the Transformative Play Initiative Seminar 2022: Role-playing, Culture, and Heritage, October 20-21, 2022. Transformative Play Initiative. YouTube, October 20.

Baker, Ian S., Ian J. Turner, and Yasuhiro Kotera. 2022. "Role-play Games (RPGs) for Mental Health (Why Not?): Roll for Initiative." *International Journal of Mental Health and Addiction*, 11: 1-9.

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Bowman, Sarah Lynne. 2013. "Social Conflict and Bleed in Role-playing Communities." *International Journal of Role-playing*, 4: 4-25.

Bowman, Sarah Lynne and Evan Torner. 2014. "Post-Larp Depression." *Analog Game Studies*, 1, no. 1 (August 1, 2014).

Bowman, Sarah Lynne. "Returning to the Real World: Debriefing After Role-playing Games." *Nordic larp,* December 8, 2014.

Burns, Dylan. 2014. "The Therapy Game: Nordic Larp, Psychotherapy, and Player Safety." In *The Wyrd Con Companion Book 2014*, edited by Sarah Lynne Bowman, 28-41. Los Angeles, CA: Wyrd Con.

Cierjacks, Martin. 2002. "Life-Action-Roleplaying als Methode des Teamtrainigs." *Mannheimer Beiträge zur Wirtschafts- und Organisationspsychologie* 1/2002: 17-27.

Connell, Megan, Elizabeth D. Kilmer, and Jared N. Kilmer. 2020. "Tabletop Role-playing Games in Therapy." In *Integrating Geek Culture into Therapeutic Practice: The Clinician's Guide to Geek Therapy*, edited by Anthony M. Bean, Emory S. Daniel Jr., Sarah A. Hays. Fort Worth, TX, USA: Leyline Publishing.

Connell, Megan. 2023. *Tabletop Role-Playing Therapy: A Guide for the Clinician Game Master*. W. W. Norton and Company.

Diakolambrianou, Elektra. 2020. "LARP as a Tool for Personal Development and Psychotherapy." Conference talk, March 7, 2020 at Portal 8 LARP Convention, Zagreb, Croatia. Geexus. YouTube, Mar 8.

Diakolambrianou, Elektra. 2021. "The Psychotherapeutic Magic of Larp." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 95-113. Oslo, Norway: Knutepunkt.

Fatland, Eirik. 2016. "History of larp - Larp talk by Eirik Fatland." Talk at Larpwriter Summer School July2016, Ruta, Lithuania. Larpwriter Summer School. YouTube, July 13.

Fein, Elizabeth. 2015. "Making Meaningful Worlds: Role-Playing Subcultures and the Autism Spectrum." *Culture Medicine and Psychiatry* 39, 2: 299-321. DOI: https://doi.org/10.1007/s11013-015-9443-x

Fein, Elizabeth. 2018. "Live Action Role-playing and the Autism Spectrum." Keynote, May 17, 2018 at the Role-playing and Simulation in Education Conference 2018 Northeastern University, Boston, MA. Living Games Conference. YouTube, August 17.

Fliegel, Steffen. 2020. "Rollenspiele." In *Lehrbuch der Verhaltenstherapie*, edited by Jürgen Margraf and Silvia Schneider, 579-586. Berlin/Heidelberg: Springer.

Franke, Gabriele Helga. 2002. *Die Symptom-Checkliste von L. R. Derogatis – Deutsche Version (SCL-90-R).* 2nd ed. Göttingen: Belz Test.

Geneuss, Katrin Anne. 2019. "'*Die waren ja mittendrin!: Ganzheitliches Lernen im Rollenspiel. EduLARP: Grundlagen-Wirkungen-Einsatz im Deutschunterricht*.' Ludwig- Maximilians-University Munich.

Hautzinger, Martin, Ferdinand Keller, and Christine Kühner. 2007. *Beck-Depressions Inventar Revision* (rev. 2nd ed.). Frankfurt a.M.: Pearson Tests.

Hinsch, Rüdiger and Ulrich Pfingsten. 2015. *Gruppentraining sozialer Kompetenzen* (rev. 6th ed.). Weinheim: Beltz.

Huprich, Steven K., Ketrin Lengu, and Carly Evich. 2016. "Interpersonal Problems and Their Relationship to Depression, Self-esteem, and Malignant Self-regard." *Journal of Personality Disorders* 30, no. 6: 742-761. DOI:101521pedi201529227

Jensen, Maria Kolseth. 2021. "Larp in Leadership Development at the Royal Norwegian Naval Academy (RNNA)." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde. Oslo, Norway: Knutepunkt.

Jung, Carl Gustav. 2001. *Archetypen.* München: DTV.

Kilmer, Elizabeth D., Adam D. Davis, Jared N. Kilmer, and Adam R. Johns. 2023. *Therapeutically Applied Role-Playing Games: The Game to Grow Method*. Routledge.

Kim, Won, Seoung-Kyeon Lim, Eun-Joo Chung, and Jong-Min Woo. 2009. "The Effect of Cognitive Behavior Therapy-Based Psychotherapy Applied in a Forest Environment on Physiological Changes and Remission of Major Depressive Disorder." *Psychiatry Investigation*, 6, no. 4: 245–254. DOI: 10.4306/pi.2009.6.4.245

Kipper, David A. 1992. "The effect of two kinds of Role-playing on self-evaluation of improved assertiveness." *Journal of clinical psychology*, 48, no. 2: 246-250. https://doi.org/10.1002/1097-4679(199203)48:2<246::AID-JCLP2270480217>3.0.CO;2-B

Kolbeck, Sabine, and Reinhard Maß. 2009. *Fragebogen zu sozialer Angst und sozialen Kompetenzdefiziten: SASKO*. Göttingen: Hogrefe.

Kühner, Christine, Christin Bürger, Ferdinand Keller, and Martin Hautzinger. 2007. "Reliabilität und Validität des revidierten Beck-Depressionsinventars (BDI-II)." *Der Nervenarzt*, 78, no. 6: 651-656. DOI: 10.1007/s00115-006-2098-7

Larmo, Anneli, 2010. "Mentalisaatio – Kyky Pitää Mieli Mielessä." *Lääketieteellinen Aikakauskirja Duodecim* 126, no. 6: 616–622.

Laugeson, Elizabeth A., and Mi N. Park. 2014. "Using a CBT Approach to Teach Social Skills to Adolescents with Autism Spectrum Disorder and Other Social Challenges: The PEERS® method." *Journal of Rational-Emotive and Cognitive-Behavior Therapy* 32: 84-97.

Ledochowski, Larissa, Renee Stark, Gerhard Ruedl, and Martin Kopp. 2017. "Körperliche Aktivität als therapeutische Intervention bei Depression [Physical activity as therapeutic intervention for depression]." *Der Nervenarzt* 88, no. 7: 765–778. DOI: https://doi.org/10.1007/s00115-016-0222-x

Leménager, Tagrid, Sabine Hoffmann, Julia Dieter, Iris Reinhard, Karl Mann, and Falk Kiefer. 2018. "The Links between Healthy, Problematic, and Addicted Internet Use Regarding Comorbidities and Self-concept-related Characteristics." *Journal of Behavioral Addictions* 7, no. 1: 31-43. https://doi.org/10.1556/2006.7.2018.13

Leménager, Tagrid, Miriam Neissner, Thomas Sabo, Karl Mann, and Falk Kiefer. 2020. "'Who Am I' and 'How Should I Be': A Systematic Review on Self-Concept and Avatar Identification in GD." *Current Addiction Reports* 7, no. 2: 166-193. https://doi.org/10.1007/s40429-020-00307-x

Lehto, Kerttu. 2021. "Role-Playing Games and Well-Being." *International Journal of Role-Playing* 11: 72-93.

Linnamäki, Jori (Pitkänen). 2019. "Formas o Métodos Para el Cambio. ¿Cómo contribuyen al cambio el Psicodrama, el Sociodrama, el Teatro Playback y el Role-playing educativo de acción en vivo o EDULARP." *La Hoja de Psicodrama* 28, no. 71 (May 2019).

Mendoza, Jonathan. 2020. "Gaming Intentionally: A Literature Review of the Viability of Role-Playing Games as Drama-Therapy-Informed Interventions." Masters' thesis, Lesley University, Cambridge, MA.

Maddux, James E., and Lisa J. Meier. 1995. "Self-Efficacy and Depression." In *Self-Efficacy, Adaptation, and Adjustment. The Plenum Series in Social/Clinical Psychology*, edited by James E. Maddux, 143-169. Boston, MA: Springer. https://doi.org/10.1007/978-1-4419-6868-5_5

McManus, Freda. 2022. "The Style and Structure of CBT." *Cognitive Behavioural Therapy: A Very Short Introduction*, Very Short Introduction. Oxford Academic, April 21. https://doi.org/10.1093/actrade/9780198755272.003.0004

Mößle, Thomas, Klaus Wölfling, H-J. Rumpf, Florian Rehbein, Kai W. Müller, Nicholas Arnaud, Rainer Thomasius, and Bert T. te Wildt. 2014. "Internet-und Computerspielsucht." In *Verhaltenssüchte: Grundlagen, Diagnostik, Therapie, Prävention*, edited by Karl Mann, 33-58. Berlin/Heidelberg: Springer.

Pietrek, Anou, Maria Kangas, Reinhold Kliegl, Michael A. Rapp, Stephan Heinzel, Jolene van der Kaap-Deeder, and Andreas Heissel. 2022. "Basic Psychological Need Satisfaction and Frustration in Major Depressive Disorder." *Frontiers in Psychiatry*, 13-2022. https://doi.org/10.3389/fpsyt.2022.962501

Revell, Stephanie, and John McLeod. 2016. "Experiences of Therapists Who Integrate Walk and Talk into Their Professional Practice." *Counselling and Psychotherapy Research*, 16(1): 35-43. DOI: 10.1002/capr.12042

Rosselet, Julien G., and Sarah D. Stauffer. 2013. "Using Group Role-Playing Games With Gifted Children and Adolescents: A Psychosocial Intervention Model." *International Journal of Play Therapy*, 22, no. 4: 173–192.

Schöttke, Henning, Julia Lange, Mario Imholz, and Karl heinz Wiedl. 2011. "Development of a Screening Measure for the Assessment of Personality Disorders: The Personality Disorder Screening–short Version (PSS-K)." *Verhaltenstherapie* 21 no. 3: 154-161. https://doi.org/10.1159/000329747

Schuh, Angela, and Gisela Immich. 2022. "Effects of Spending Time in the Forest: Current Studies." In *Forest Therapy - The Potential of the Forest for Your Health*, edited by the authors, 61-88. Berlin/Heidelberg: Springer. https://doi.org/10.1007/978-3-662-64280-1_4

Segrin, Chris. 2001. *Interpersonal Processes in Psychological Problems*. New York: Guilford.

Segrin, Chris, and Jeanne Flora. 2000. "Poor social skills are a vulnerability factor in the development of psychosocial problems." *Human Communication Research* 26, no. 3: 489-514.

Staddon, John E. R, and Daniel T. Cerutti. 2003. "Operant Conditioning."*Annual Review of Psychology* 54, no. 1: 115-144. https://doi.org/10.1146/annurev.psych.54.101601.145124

Tonge, Natasha A., Michelle H. Lim, Marilyn L. Piccirillo, Katya C. Fernandez, Julia K. Langer, and Thomas L. Rodebaugh. 2020. "Interpersonal problems in social anxiety disorder across different relational contexts." *Journal of Anxiety Disorders* 75: Article 102275. DOI: https://doi.org/10.1016/j.janxdis.2020.102275

Tychsen, Anders, Michael Hitchens, Thea Brolund, and Manolya Kavakli. 2006. "Live Action Role-playing Games: Control, Communication, Storytelling, and MMORPG similarities." *Games and Culture* 1, no. 3: 252-275.

Varrette, Matthew, Jack Berkenstock, Adams Greenwood-Ericksen, Anthony Ortega, Faith Michaels, Veronica Pietrobon, and Marc Schodorf. 2022. "Exploring the Efficacy of Cognitive Behavioral Therapy and Role-playing Games as an Intervention for Adults with Social Anxiety." *Social Work with Groups* 46, no. 2: 140-156. https://doi.org/10.1080/01609513.2022.2146029

Wölfling, Klaus, Kai W. Müller, and Manfred Beutel. 2010. "Die Skala zum Onlinesuchtverhalten bei Erwachsenen (OSVe-S)." In*Prävention, Diagnostik und Therapie von Computerspielabhängigkeit*, edited by Dorothee Mücken, Annette Teske, Florian Rehbein, and Bert te Wildt, 212–215. Lengerich: Pabst.

Wölfling, Klaus, Kai W. Müller, Michael Dreier, Christian Ruckes, Oliver Deuster, Anil Batra, Karl Mann, Michael Musalek, Andreas Schuster, Tagrid Leménager, Sara Hanke, and Manfred E. Beutel. 2019. "Efficacy of short-term treatment of internet and computer game addiction: A randomized clinical trial." *JAMA psychiatry*, 76, no. 10: 1018-1025. DOI: 10.1001/jamapsychiatry.2019.1676

APPENDIX I: FIGURES

Figure 1: Riley's goal achievement. Goal achievement on a 6-point Likert scale. Minimum score on the scale: 1, maximum score: 6.
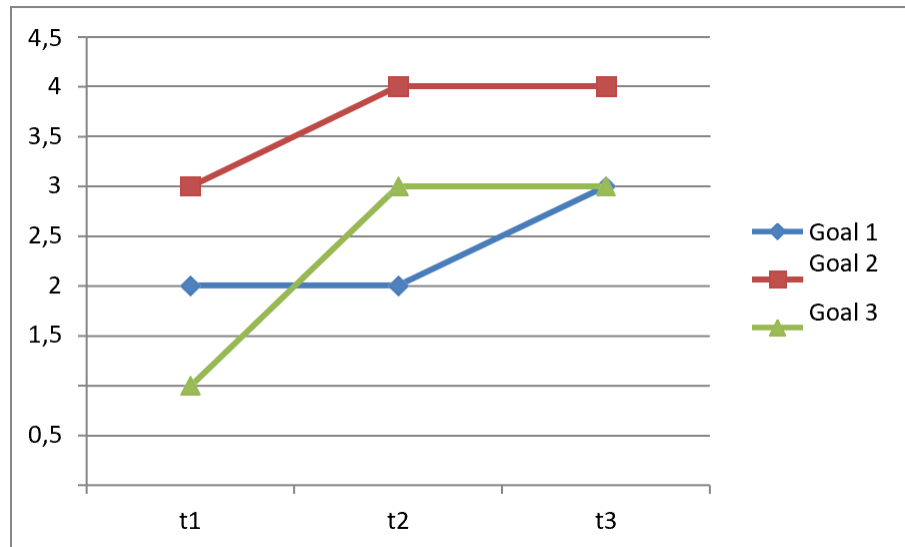

Figure 2: Course of the SASKO. History of the SASKO t-score (sum score for each participant). Scores (T values) between 40 and 60 are considered average.
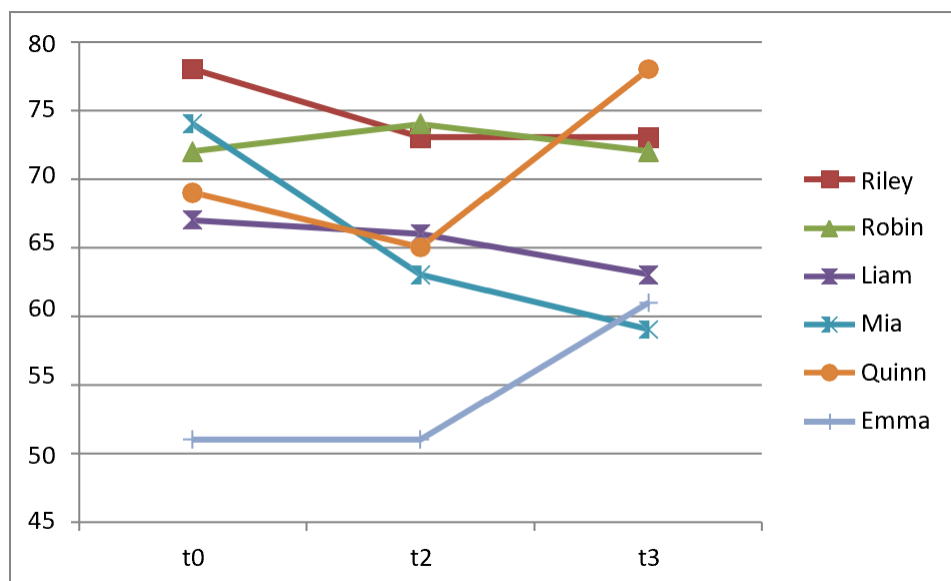
Figure 3: Course of the BSI scale Uncertainty in Social Contact. Sum score on the Uncertainty in Social Contact subscale of BSI, for each participant.
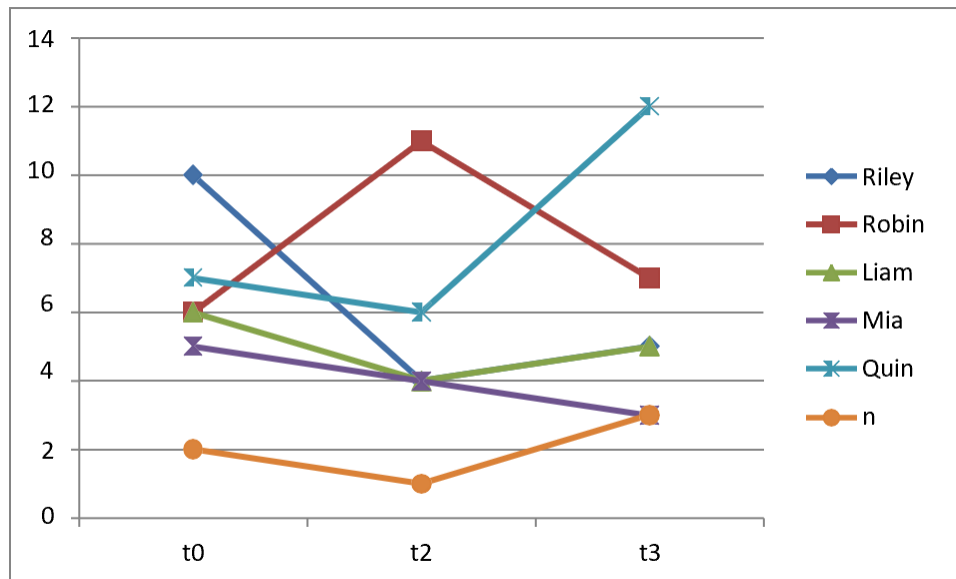

Figure 4: Course of Internet dependence measured in the OSVe-S. Sum score of each participant; a value of 7-13 means abuse, a value above 13 means dependency.
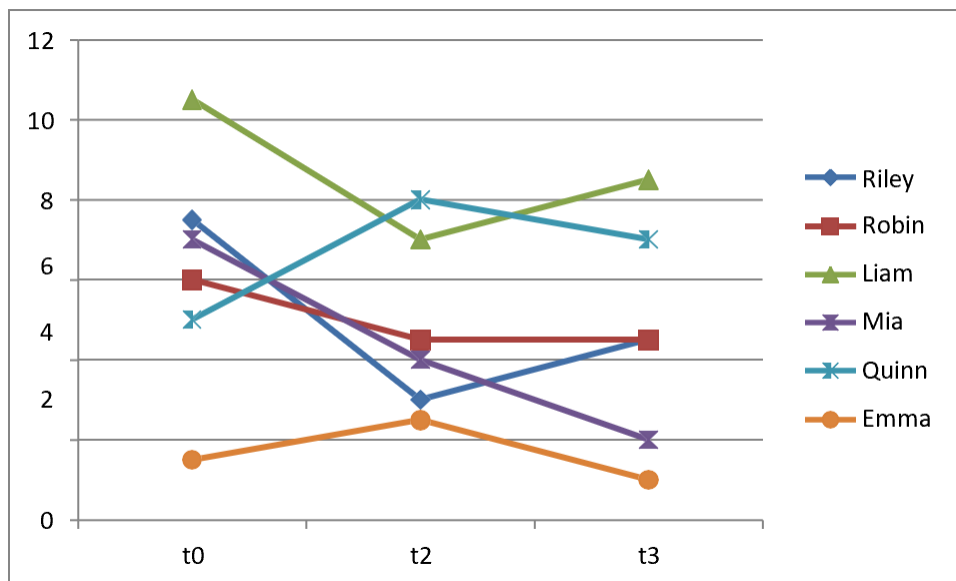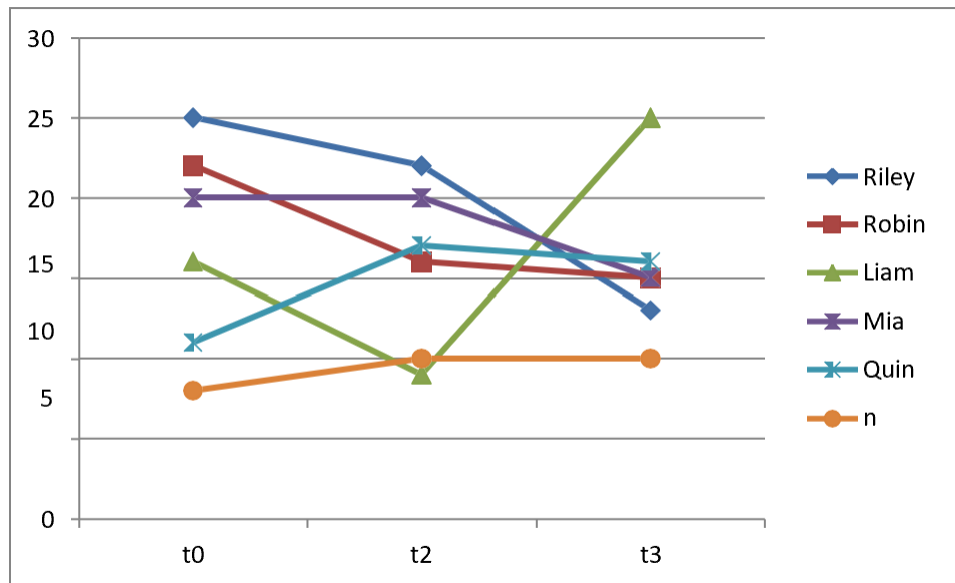
Figure 5: Course of the BDI-II. Sum score of the BDI-II of each participant. 9-13: minimal depression, 14-19: mild depression, 20: moderate depression, 29 and above: severe depression. Maximum: 63.

Lennart Bartenstein (born 1991) is a psychologist with his own practice in Schleswig, Northern Germany. He has additional training in cognitive behavioral therapy, EMDR and group therapy. He is also an author with a focus on fantasy, including novels and podcasts. He is active as a larp designer in the Rollenspielverein Galowa e.V.

Surveying the Perspectives of Middle and High School Educators Who Use Role-playing Games as Pedagogy

Abstract: This qualitative study analyzes interviews from 11 educators who use TTRPGs as pedagogy to identify common perspectives about what benefits these games bring to their classrooms. Findings across settings include practitioner reports of increased engagement, new social connections, the development of affinity groups, and a lowering of perceived social stakes for students in the setting. Additionally, teachers described a change in student attitudes about success in the classroom from an individualistic to collectivist stance. These findings are then examined through Gary Alan Fine's TTRPG Frame Theory. Also noted is the lack of connection between the current work of RPG scholars and the work of these practitioners.

Keywords: middle school, high school, Frame Theory, education, practitioner perspective

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1. INTRODUCTION

Academics have been publishing work on using role-playing games and games in learning settings for years (Gee 2007; Gee 2012; McGonigal 2012; Zagal and Deterding 2024). Hammer et al. (2024) tell us that effective learning with RPGs happens when learning theories are aligned with the strengths of role-play and are appropriately supported by the learning environment. This is not new news. In fact, John Dewey was writing about play in learning over 100 years ago, (Brickman and Cordasco 1970).

At the same time, a number of educators have made the observation that using role-playing games (RPGs) or tabletop role-playing games (TTRPGs) in middle and high school classrooms has been an engaging and fruitful way to teach content and social skills to a wide variety of students. There remains a disconnect between the theoretical work of these RPG scholars and an understanding of how current educators are actually utilizing role-playing games in their own classrooms.

Although there is informal use of RPGS as pedagogy in K-12 educational settings, researchers and educators do not have a common universal understanding as to what learning RPGs (LRPGs) add to student learning beyond game-based motivation (Plass et al. 2015).

There is a lack of consensus among practicing K-12 educators themselves on some of the most fundamental terms and concepts. For example, some practitioners describe their work as "gamification" (Sederquist 2018; Thompson 2019; Landry Games Studio 2020), while others describe the community as "TTRPG-educators" (Fischer 2021) or "champion[s] for #RPGsinschools" (Reznichek 2021). This adds additional layers of complexity when discussing even the basics of this practice.

Is this because practitioners simply have not gelled around common terminology to describe what they are seeing? Or could it be that practitioners have very different objectives and understandings of what RPGS in the classroom do as pedagogy? What is driving these educators to independently come to the use of RPGs? What do educators understand to be the value of this methodology for their students? Why are educators not using current academic research? There is much work still to do.

2. THE IMPACT OF RPGS ON STUDENT PERSPECTIVE AND EXPERIENCE TAKING

In the US, there has been a recent boom in using TTRPGs as therapeutic tools for social skills and counseling, headed by organizations such as Game to Grow, The Bodhana Group, and Geek

Therapeutics. One of the inherent parts of an RPG is taking on the role of someone other than oneself. As Carnes (2014) describes, this character does not need to have experiences available to the real life of the person. Through a game, the player can vicariously experience some of the emotional process of "living through" the in-game events, albeit with much lowered stakes (Gee 2007). "Game experiences, therefore, become part of the player's intellectual and emotional history, which future educational experiences can build on to construct new meanings" (Hammer et al. 2024).

Kilmer et al. (2023) describe the social emotional benefits for youth who play TTRPGs, including providing a "sandbox" environment to learn and make mistakes, practice interpersonal conflict with lowered stakes, and have the opportunity to participate in complex social and ethical reflection. It is clear that TTRPGs can have a positive social-emotional impact on players, but for use in the classroom, there is also an inherent need to forward the academic goals and curriculum of the class using the game. Although there are stand-alone studies that show success using RPGs in the classroom (Zalka 2012; Bowman and Standiford 2015; da Rocha 2018; Cullinan and Wood 2024), the use of role-playing games in K-12 settings remains an under-researched area of study.

3. QUALITATIVE RESEARCH TOOLS

An informal community of educators is describing using RPGs as a successful pedagogy in their classrooms. However, one of the great challenges of analyzing successful pedagogy is determining what success means, and then devising a way to measure that. For the purposes of this study, I chose to allow practitioners to self-identify as utilizing RPGs in a "successful" way. My intention was to find out what they believed success to look like in their classrooms, and if there were themes that stretched between settings.

An established way for qualitative researchers to uncover themes between the experiences of participants is the use of interviews (Kvale 1996). This is especially true when researchers find data feasibility to be indistinct and/or researcher are attempting to examine a phenomenon rather than just record it (Ruslin et. al. 2022).

Interviews can be done as structured interviews that stick to established questions only, as semi-structured interviews that have established questions, but also allow for other conversation, or unstructured interviews, which follow a more unstructured conversational path (Kvale 1996; Holstein and Gubrium 2001). Semi-structured interviews are directed but adaptable, allowing the researcher to record more in-depth answers to questions than a fully structured interview. However, it has more structure than an open-ended conversation, allowing the interview to keep focused on the topic at hand (Ruslin et. al. 2022).

Alternatively, researchers may choose to use questionnaires when they seek a broader, but more superficial understanding or case studies or ethnographic interviews when they want to narrow their focus but increase depth of understanding (Ruslin et. al. 2022).

3.1 Research Question

What benefits do practitioners see in the use of RPGs in their classrooms? The current body of research is missing the answers to this basic question. The intention of this paper is to create a description of what is driving teachers to the RPGs as learning tools in 5-12th grade classrooms. What do these teachers believe are the benefits for learners in their classrooms?

To this end, I interviewed 5-12th grade educators who use RPGs as pedagogy in their classrooms, to determine why they felt the use of TTRPGs in their setting was worthwhile and answer the question: what are educators' shared perspectives on the benefits of TTRPGs in their diverse academic settings?

4. METHODS

4.1 Context

To gather data for this qualitative study, I interviewed teachers who self-identify as using role-playing games or gamification as a major part of their pedagogy. Interviewees were recruited from RPGs in education Discord servers, Twitter posts, recommendations from other practitioners, and my direct recruitment of teachers who had previously used #gamemyclass hashtags in Twitter posts. This study was approved through the IRB of Lesley University. After the initial contact via social media, participants had the opportunity to preview questions before the interview session. They gave both written permission before the interview and oral permission at the beginning of the interview. Participants also had the opportunity to review their answers before any research analysis began.

Interviewees selected met the following criteria for setting, student age and pedagogy. They each teach in a public or private school setting (as opposed to home school, club, or afterschool settings). They taught student populations between 5th and 12th grades, (approximately 10-18 years old), and self-identified as using RPGS as a major part of their pedagogy in the classroom setting, although their schools did not use RPGs as a major part of the overall curriculum, unlike Østerskov Efterskole in Denmark and other more experimental schools. Eleven interviewees met these criteria. Nine of the teachers self-identified as using role-playing games, and two self-identified as using gamification in their classrooms, but functionally did similar work within their classrooms. Seven of the teachers currently work in the USA, and four work outside of the USA (See Figure 1).

4.2 Participants

Semi-structured interviews occurred in October and November of 2022. Participants were asked the following questions, as well as clarifying or follow-up questions as appropriate to deepen interviewer understanding. Due to the semi-structured nature of the interview, when appropriate, the conversation went beyond the established questions, to add more depth of explanation and context (Ruslin et al. 2022).

- Describe yourself and your educational setting.
- What do the terms gamification and RPGs in education mean to you?
- Describe how you use RPGs/Gamification in your educational setting.
- What drawbacks do you see, or challenges do you find with this method?
- What impact, if any, do you think RPGs have in your classroom for academic skills?
- What impact, if any, do you think RPGs in your classroom have on SEL?
- What impact, if any, do you think RPGs in your classroom have on Executive Functioning?
- What advice do you have for people who want to use RPGs in the classroom?
- What else should I know?
-

The interviews lasted approximately between 35-55 minutes. They were conducted, recorded, and transcribed via Zoom. Transcripts were later lightly edited for clarity, spelling, and grammar by the author. To ensure the validity of the data collected, transcripts were returned to participants, as a form of member checking, so they could review and annotate the transcript if they wished. This allowed them to add or subtract any details from the transcript before coding. Eight of the eleven participants responded directly to this step, and two participants added or changed demographic details.

Figure 1: Demographics of Participants

	Gender	Country	Subject	Student grade level	Type of school	Stand alone or embedded	Self-Defined Gamified or RPG
1	M	USA	Social Studies	9th-12th Mixed High	Suburban public	Stand alone	RPG
2	M	USA	Band	6th-8th Mixed Middle	Urban public magnet	Embedded	RPG
3	F	Canada	English & Theater	9th-12th High	Rural public	Embedded	RPG
4	M	USA	Health	5th-8th Middle	Suburban public	Stand alone	RPG
5	M	Cambodia	English & Public speaking	9th-11th Mixed High	ESL Private	Stand alone	RPG
6	M	Canada	All (self-contained)	5th Elementary	Public suburban	Embedded	gamified
7	M	Canada	All (self-contained)	6th Elementary	Suburban Public	Embedded	gamified
8	M	USA	English & Science	5th Elementary	Suburban/ rural Public	Stand alone	RPG
9	M	USA	AP Calculus	12th High	ESL Private	Embedded	RPG
10	M	USA	English & History	6th and 7th Middle	Small K-12 private school	Stand alone	RPG
11	m	USA	Title 1 English, Advanced English	7th and 8th Middle	Setting 1: urban public Setting 2: suburban Public	Stand alone	RPG

4.3 Data Analysis

The interview transcripts were analyzed using applied thematic analysis (ATA) (Guest et al. 2012). ATA is a positivist/interpretive approach that requires themes to be supported through text evidence and is suited to "finding solutions to real-world problems" (17).

5. FINDINGS AND DISCUSSION

Emergent themes and subthemes fell into three major groups. Theme one was the structural and pedagogical impacts on teaching. Subthemes include "phenomenon-based learning," a centering on student emotional experiences and differentiation of class work. Theme two was social emotional learning. Subthemes include games as semi-structured learning and social experiences, the emergence of affinity groupings and a shift in what students feel is winning, as seen through the lens of Fine's Frame Theory. Theme three was the educator's personal history of connection to RPGs, but a lack of connection to established edu-RPG research, in the rational of why teachers began teaching with edu-RPGs in their classrooms.

Note that the greater TTRPG community has been in conversation about the importance of safety tools to help ensure a positive prosocial experience in role-play games (Shaw and Bryant-Monk 2024). Due to the improvisational nature of RPGs, it is possible that players may delve into content that, even unintentionally, becomes upsetting or harmful to one or more players. Because the educators in this survey are working within a school context, there is an assumption that the behavior of student players and the content of the games will fall within the established structures of the school setting. Additionally, teachers are there to act as mediators and mentors in such situations, as they regularly do as part of their professional responsibilities. Although safety tools are not a focus of the findings here, that is because of the underlying assumption that school norms and classroom safety tools will be used in an educational setting. This is an important part of any healthy role-playing group experience. Additionally, it is beholden on the educators to make sure that any TTRPG experience is thoughtfully designed not to reinforce negative stereotypes, racism, and other problematic tropes that can come up in a storytelling format (Hammer et al. 2024).

5.1 Structural and Pedagogical Impacts to Teaching

Teachers who participated in this research described their own reflexivity as being student-centered, inquiry-centered, and cooperative learning-based. They also described the limitations and expectations of their curricula as impacting what they could do in the classroom setting. The structures and freedom of TTRPGs helps them bridge the gap between their reflexivity and the reality of modern teaching. Responses from participants fell into the following subthemes of the structural and pedagogical impacts to their teaching.

5.2 Phenomenon-Based Educational Experiences as Engagement

Phenomenon-based science is an approach where students are introduced to an engaging phenomenon that is not easily understood at first glance, allowing them to ask questions, create theories and draw on multiple areas of science (NOAA 2023). One of the teachers interviewed described this and compared RPGs in his classroom to this teaching method. He called it "phenomenon-based English," and this sums up a lot of what educators described.

The engagement with the plot of the game -- including challenging problems, and choices with consequences -- pushed students to utilize their academic and teamwork skills. As noted by Winardi and Septania, "The draw of using RPG in education mainly comes from its benefit to simulate a group dynamic and presenting a scenario that otherwise would not be encountered in daily life to provoke creativity and critical thinking" (2023, 7). The classroom RPG makes for engaging use of newly learned content and skills beyond rote recitation. Although there may be specific puzzles or events within the fiction of an RPG that have a correct answer, the overall approach towards solving problems and forwarding the plot is open ended, giving students a reason to think creatively and engage with the content and skills they have.

Participants described observing character analysis, perspective taking, quick multidisciplinary thinking, referencing texts, the use of content learning to support in game decisions, numeracy, vocabulary growth and peer to peer feedback, among other observations of student behavior in their classroom. They drew a direct line from student interest in the in-fiction events of the game to an emerging classroom culture of discovery. A self-contained 5th grade teacher said:

> You're going to get cooperation and that gets into the other areas. A sense of urgency and need to do the work. Those are things that are authentic that make the educational aspect of it real. [A student might say] "I have to know how to calculate Pythagorean's theorem because I need to do this right now. It's not just something that Mrs. Hozwaltz wants me to memorize so I could spit it out on a test later. I gotta go kill Duke Yoyobutthead because he done poison the water hole and I'm going to get him!"

The emerging collaborative fictional world spilled over into the real-life culture of the classroom as students became more interested in utilizing their emerging skills and content knowledge to solve immediate in-fiction problems.

5.3 A Centering on Student Emotional Experiences (Real and Fictional)

More specifically, the use of student generated fictional characters gave many teachers a way to connect kids more intimately to the intricacies of content standards on an emotional level. They reported that students had more motivation and interest in working on assignments that involved their characters - for example, calculating the damage their character could do, creating backstories, connecting characters with the hero's journey, genres, and archetypes.

Although these characters are not real, and the experiences students had while playing these characters are not real, the teachers described the emotional connection students have to their characters being quite real. The specific events of the game, or interests and skills of the character helped students make choices in what to study and what plot choices to make.

RPG researchers describe the impact of the emotions of the fictional character on the player, and vice-versa, as *bleed* (Bowman 2015). Students can feel the joy of success as their characters and become invested in their progress. They become invested in the story of these character and want to see them be successful.

However, when there is in-game failure or something unexpected happens, players can also separate themselves from their character. It is not the student who made the error, it was the fictional character. This is called *alibi* (Bowman 2015). This lowers the social and emotional stakes of failure, and allows students to try to work with academic concepts multiple times without fearing judgment from peers or teachers.

5.4 Differentiation of Work

Additionally, the fictional layer of plot in the classroom allowed for differentiation of work to happen within a classroom context. As described above, students made choices in what to study based on their characters or plot. If an in-game group of students became interested in a specific subject due to the plot of their game, the entire group might research and learn content with value to them, while other groups studied something else. This could happen on an individual level as well, easily adding opportunities for enrichment and extension. The fictional game provided a more authentic reason to do work and allowed for differentiation while allowing all groups to learn the same skill set.

Also, within the context of the plot, the teachers, as moderators, can give a variety of levels of challenge to different students within the same classroom, with the same goals of solving an in-game mystery. A 7th and 8th grade English teacher said:

> I can say that using it as a tool is not only good for English… but it also seems to affect all the other disciplines that people would want a tool to affect. You can't be dumb and play [RPGs]. Say a kid starts and you think there's no way they're going to be able to play this game. If you could teach them to play that game, they're no longer that kid anymore. They're going to be able to learn any system that you want them to. So academically, I'll say that the challenges provided by the game are enough for some of the highest learners to be challenged. Of course, the lower learners are challenged, but the incentive is there to attempt, because the idea of playing a game at all, no matter how much or little they understand what they're actually doing, is enough to allure them into at least sitting there with you and helping them fill it out. It's an incredibly powerful tool and I've seen it do almost miracle work.

5.5 Impact on Student Relationships

5.5.1 RPGS as Transformative Semi-Structured Social and Learning Experiences

Participants described RPGs as semi structured social experiences in the classroom that provide support and opportunities for students to make social or academic mistakes in a supportive space. Because RPGs are collective storytelling experiences that occur over time, there is an opportunity for reflection and a reason for students to come back to the table and discuss intragroup friction or player disagreements (Kilmer et al. 2023). This is different from group work. What the participants describe is more akin to an affinity space, as coined by Gee (2017).

5.6 RPGS in Context - RPGs as Affinity Spaces

Affinity spaces, as defined by Gee (2004; 2017), are primarily online spaces that have two defining features: a portal and an endeavor. They are bounded spaces where people with the same interests come together to discuss these interests. A Discord server to share fan theories about *The Bachelor*, or a subreddit about fixing antique Fords might be an affinity space. But affinity spaces are more than a place to gather. They are spaces where people have a common affinity for solving the same kinds of problems (Gee 2017).

Affinity spaces have common endeavor, low bias, multiple routes to leadership, shared expertise, varied levels and kinds of participation and content creation, and passionate members (Halaczkiewicz 2020). Because of this, there is an ebb and flow of leadership and power within the group. As tasks change or different subjects become the focus, different members of the group can take leadership roles

and provide expertise. This is a non-hierarchical system where anyone can make content, ask questions and provide leadership based on their emerging expertise (Gee 2017).

RPGs in classrooms function as an emergent in-person affinity space. Some teachers described RPG games with a whole class divided into smaller factions or guilds. In other classes, there are multiple independent games going on within the same space. In each case, the boundaries of the affinity group(s) are with whoever else is playing in the same fiction. Unlike in most spaces, where the passion for the shared endeavor builds the community, classrooms, by function, must begin with the group of students who share the classroom. RPGs as pedagogy allows for the building of shared endeavor within the fictional space over time. As the high school Drama and English teacher in the study explained:

> My students identify with one another better all of a sudden. Community is being created in a way, and especially in an area like ours where the strata is so diverse. I have found that to really break down stereotypes and to break down divisions between the social groups in our school, the second they have to cooperate and learn to communicate with one another... They'll ask each other more about their day, and then I hear them having more conversations in the hallway and bullying becomes a little less, at least in my classroom and when I'm around those students, they've been forced to work as a team, they've been forced to take turns and listen, truly, actively listen to one another.

Whitton (2018) described specific playful learning tactics for the classroom. These include role-play or storytelling; engendering empathy for characters and imaginative story generation; including elements of public performance to a group; and the act of making things. Whitton notes the importance of having a safe place to fail and try again. RPGs inherently include the majority of these tactics. Additionally, RPGs, as games, have explicit rules and participant roles that allow for scaffolding and guardrails as students develop interpersonal skills. The game format takes some of the implicit social rules of interaction and makes them explicit within the game setting: turn taking, points, success/failure, resource management.

Participants described how this allows for increased purpose and lower stakes in academic work. Additionally, it allows for immediate social feedback in fiction that is lower stakes than in real life. RPG play encourages practice of emotional regulation, teamwork, patience, thoughtful risk taking, and empathy in students because they have a shared goal of progressing within the fiction with their team. The fictional nature of the game allows for student alibi (Bowman 2015) as described above, lowering the perceived social stakes for failure in the classroom. Thus, failure often became humorous, and the structure of the game allows for students to reassess the situation and try again, instead of lashing out or giving up.

Adolescent loneliness is associated with a lack of positive social relationships at school and home (Yang and Petersen 2020). The development of new social connections, friendships, and affinity groups within the class are crucial to student development as learners and as people.

Teachers who use RPGs in their classrooms described a deepening of friendships, the emergence of new friend groups based on their RPG groups, not social cliques, and students returning years later to talk about in-fiction events together. Daniau (2016) found that RPGs are effective to foster growth of content knowledge, team building, collaborative creativity, and assist with personal growth and exploration. As Coe says, "Once participants experience the many motivating processes of [RPGs] they continue playing because there are multiple layers of processes that allow them to meet psychological, social, emotional, and developmental needs and drives in a manner that propels them to continue playing" (2017, 2857).

5.6.1 A Change in What "Winning School" Means to a More Collectivist Stance

Teachers interviewed for this project clearly had a passion for their games and spent much of the interview describing the fictional world they and their students had created. Whitton describes the fictional magic circle as being key to playful learning; it is an environment in which many real-world rules can be transformed and evolved. Key to the pedagogical rationale for using playful learning in education is support for the spirit of play, development of intrinsic motivation and the positive construction of failure as part of the process (Whitton 2018).

Participants in this study describe this as well. Although participants spent much of their time in their interviews describing the fictional world of the classroom, the most interesting results were the explicit and implicit descriptions of a shift in the community-based thinking and strategic gameplay thinking of students. We can use Fine's Frame Theory to unpack this further.

5.7 RPGs in Context: Gary Alan Fine's Three Frames Theory

The foundational text about learning and thinking in the brains of RPG players was written by Gary Alan Fine in 1983, in his book *Shared Fantasy: Role Playing Games as Social Worlds*. Fine's work proposed a three framed system within the minds of role-players as they played a game together. These consist of a primary (self/social) frame inhabited by the actual people playing, a secondary (strategic/ game) frame inhabited by the strategic thinking done by players, and tertiary (diegetic) frame inhabited by the fictional characters, such as in game dialogue, dramatic irony within the plot, and the emotions of the characters within the fictional context of the story (Fine 2002). This is similar to the results found by Eseryel et al. (2014) in their study of play relationship to computer games.

5.7.1 Self/Social Frame

Fine's first frame is an acknowledgement that the game is played by human people. There are skill sets that must be utilized to facilitate the event taking place, and a participant's inclusion in this event. These include time management, turn taking, group dynamics, understanding social norms of the group, body regulation, and attentional regulation.

5.7.2 Strategic/Game Frame

The second frame, the in-game frame, observes the participant as a strategist within the context of the game rules. In this frame, the participant is "gaming the system" – using the resources, rules and items they have within the game to work towards the best outcome for participants individually and/or as a group. This is the frame of boardgame players, poker players, and sports, where the quantitative aspects of the game are found. This may include teamwork with other players, using combined resources to assist in the goal, or working against them. This is the frame of planning, logical thinking and resource management. This is also the frame of dice rolling and calculating moves based on the intersection of resources, dice roll outcomes, and character stats.

5.7.3 In-Fiction/Diegetic Frame

The third frame Fine describes is the in-game fictional world of play, also known as the diegetic frame or *magic circle* where participants role-play as characters within the agreed upon fiction (Stenros

2014). This is the frame where people make choices in-character that may or may not be choices they themselves would make in the social frame. The magic circle of play is another metaphor that acts as a shorthand for a more complex set of social interactions that create the in-game space (Stenros 2014). Although there is some disagreement about exactly what the magic circle means, one can observe that between the participants of imaginary play, there are spoken and unspoken agreements about what is within the fiction.

5.8 Fine's Three Frame Theory in Action

Respondents described how, previous to RPG gameplay, students had a competitive or individualistic sense of how to "play the school game." Students might be competitive over who got the best grade on a quiz, or at least were aware that their progress in the class was unrelated to the progress of the student next to them. However, one of the emergent themes of this research is the change in how students now viewed success.

Through the emergence of affinity groups and strategic play of RPGs is a student shift to a more collectivist and empathic view of success for themselves in relation to others in the class. Although students could still succeed individually, the success of their classmates directly impacted the fictional world they had co-created as well. Nel Noddings' Care Philosophy (1986) is based on the concept that future moral choices are built on the memories of caring and being cared for. The collective stakes of the in-fiction story have allowed students to begin to care about each other, and their success, in new ways. Students were able to use their understanding of how to "win school" to shift from caring about their own progress to caring about the progress of everyone within their affinity group.

A self-contained 6th grade teacher in the study stated:

My class functions much like, say, Hogwarts houses, right? They have a group that they are with the entire year and they don't succeed individually, they succeed as a collective. So, the idea is that 'Yes my own success is important, but I'm not the only one that can contribute to that.' The same would be true about failure. If you've got a student that struggles in a certain way, we need to circle around that person and lift them up and make sure that we give them what they need.

An RPG is inherently a collective storytelling endeavor. The success or failure of the group happens together, not because of any one person. With the emergence of an affinity space, different students can take leadership, have ideas, and build content for the group as the circumstances change. Students learn from each other and lean on each other's strengths. Students who are not the leaders in traditional classrooms may have a divergent point of view or different set of skills, allowing students to see each other in a different light. In this way, the group begins to rely on each other and help each other, instead of competing or discounting each other's performance within the class. As the band teacher said, "If they don't talk together and work together on that, there's no community, so [the in-class RPG] really helped with that and those kids that are in 8th grade now that went through that experience, they're all the closest of friends."

Given the complex interplay between the social, strategic, and diegetic frames of thinking in RPGs, this pedagogy allows for learning that can be harnessed by thoughtful educators to create opportunities for growth well beyond the explicit learning of facts, or extrinsic motivators of other types of educational games. Students are learning in many ways at the same time while they think they are just concentrating on the fictional aspects of the game.

5.9 A Personal Connection to RPGS and a Disconnect from RPG Research

5.9.1 My Experience

As a classroom educator myself, I found myself drawn to RPGs as educational tools because they were a solution to many conundrums at the same time – building classroom community, the possibility of differentiation, a greater impetus for students to work well together, privileging creative solutions, and fun. Unlike many of the educators interviewed, I did not play RPGs as a child, although I was a theater kid.

I knew I could not be the only person who had ever thought of using edu-RPGs as a regular part of teaching in the 5-12th grade school classroom. I was first introduced to the informal community of educators using RPGs in their classrooms through an article about Scott Hebert (CBC News 2018). He is an educator in Alberta, Canada, who had transformed his science classroom into a year-long role-playing game. This was the first time I had ever seen someone else doing what I was trying to do. Hebert suggested that Twitter was the place that educators came together to discuss what they were doing (Scott Hebert, email communication to author, October 9, 2018). Through hashtags like #gamemyclass, and later, community Discord servers, I found other educators. Four years later, the informal community of online educators became the basis for the recruitment of participants for this study.

As I became more interested in the theoretical and academic justifications for the use of edu-RPGs, outside of my own lived experience, and that of my edu-RPG-using colleagues, I was challenged to find peer-reviewed research on this topic. When I gave presentations at conferences on this topic, teachers frequently asked about academic research on the use of RPGs in the classroom, and no one seemed to know where to find any. There was a disconnect between any published research and the educators who might need it. This was why I began doing this work.

5.9.2 The Participants (Don't) Speak Out

My personal experience with discovering RPGs for the classroom was mirrored in the stories of my participants. Although I did not ask directly about how participants came to use edu-RPGs as pedagogy, the majority of interviewees mentioned their own experiences with TTPRGs and/or boardgames as impetus for utilizing them in the classroom. Participants either described childhood TTRPG games as being formative for them, or they described discovering TTRPGs and boardgames as adults, and wanting to take the camaraderie and creativity of these genres to their classrooms. A fifth-grade teacher described how he began using edu-RPGs as an enrichment for advanced learners.

> The idea of gamification in my class started off as a way to challenge my enrichment students. I had a lot of students that were very high achievers and that were able to do the work very quickly. So, I was looking for something that would keep them occupied, while the other class was working on the required curriculum… I dabbled in a little bit of like role-playing games as a teenager… I did *Magic the Gathering* a little bit… I kind of knew of game mechanics and I play some board games. [Edu-RPGs] allowed me to take all those things and steal what I could to take the best of that and build my game. From that idea of wanting to help those students that need that enrichment I thought, why just them, right? Why not make it for everybody? Let's make this a full class thing. Anyone can do this enrichment thing! And then it grew.

Another teacher said:

> [A friend] had just gotten me into *D&D* and I was sitting there and I was like, man, this is really cool game, I really enjoy. This this fun! I heard Dragon Talk and Greg Tito and Shelly Masanobu talking to some educators and I believe it was a psychologist who was talking about how he used *D&D* as a part of the RPG therapy experience. [Dragon Talk: Teaching with D&D, 6/11/18] I was just like - Oh. This is great. I could do this. This is awesome, I love it.

Another teacher mentioned how he turned to RPG games in the classroom to increase engagement and manage behaviors. He said, "I needed a behavior management strategy that was different and [gamified online behavior management system] Class Dojo was a little too young for them. These kids who are out running drugs on the streets, don't really care about the little class Dojo monster… they needed more."

However, not one participant mentioned any academic research or theoretical basis for their use of edu-RPGs in their classroom. Each one of them had drawn on person experiences, or the experiences of other teachers and/or RPG stakeholders in the growth of their own edu-RPG.

6. IMPLICATIONS AND RECOMMENDATIONS

The eleven educators interviewed for this study all value RPGs as pedagogy in their classrooms. They describe the many ways that they have observed the culture of their classrooms, the behavior of their students, and their own teaching as shifting through the use of this collective fictional storytelling framework. They describe observing more engaged learners, the creation of affinity spaces and a shift in the way students view success in their classroom. They did not mention academic research into RPGs as a motivator or support for their work.

The implication is that participants feel that RPGs have been a successful way for to have their students experience curricula. Teachers are still directing the learning to follow the content standards required by their setting, but they report that the use of RPGs gives opportunity for student centered learning, differentiation within the curricula, and increased student engagement.

Although the teachers are not in regular contact with each other, they have come to many of the same conclusions independently, based on observations of what works well for their students in the classroom setting and their personal social history with games.

Additionally, this research suggests that the work done by academic RPG researchers is not trickling down to the 5-12th grade educational practitioners that might benefit from it. There is a need for greater connection between 5-12th grade educators working with students based on their personal experiences and academics who research the theoretical grounding for this work.

7. CONCLUSION

The participants of this study have all independently decided to use this pedagogy. They are continuing to experiment with the format, rules, systems and content of their games. However, there are clear threads of purpose that weave between pedagogy in each classroom. The emergence of game-based affinity groupings between students, semi-structured social environments, and increased student effort and engagement are some of the key benefits that have been reported across settings regardless of age of students, location or content area taught.

This study is intended to be a descriptor of how educators in classroom settings understand the benefits they see from the use of this pedagogy. Additionally, I hope to begin to build a bridge between

the theoretical academic work being done and the in-classroom work of educators. It is my hope that this can be a foundational text to ask more complex questions about how to use RPGs most effectively for 5-12th grade students' academic, social and emotional learning.

Given these shared benefits across settings, additional research should be done studying classroom RPGs in more detail and design games to most effectively create desired circumstances. Much more additional research and communication between academic researchers and practicing teachers is needed to understand and assist educators in developing and utilizing this pedagogy as effectively as possible for their learners.

REFERENCES

Bowman, Sarah Lynne. 2015. "Bleed: The Spillover Between Player and Character." Nordiclarp.org, March 2.

Bowman, Sarah Lynne, and Andhe Standiford. 2015. "Educational Larp in the Middle School Classroom: A Mixed Method Case Study." *International Journal of Role-Playing* 5: 4-25.

Brickman, William W., and Francesco Cordasco. 1970. "Paul Monroe's Cyclopedia of Education: With Notices of Educational Encyclopedias Past and Present." *History of Education Quarterly* 10, no. 3: 324–37. https://doi.org/10.2307/367527

Carnes, Mark C. 2014. *Minds on Fire: How Role-immersion Games Transform College*. Cambridge, MA: Harvard University Press.

CBS News. 2018. "All Games (and Fun) in Edmonton Teacher Scott Hebert's Grade 8 Science Class." CBC News, May 14.

Coe, Darrin F. 2017. "Why People Play Table-top Role-playing Games: A Grounded Theory of Becoming as Botivation." *Qualitative Report* 22, no. 11. https://doi.org/10.46743/2160-3715/2017.3071

Cullinan, Maryanne, and Laura L. Wood. 2024. "Getting Inspired: A Qualitative Study on the Use of the *Inspirisles* Role-playing Game to Teach Middle Schoolers American Sign Language." *Simulation & Gaming* (January 26). https://doi.org/10.1177/10468781241229614

da Rocha, Fabian Quevedo. 2018. "Roll a D6: A Role-playing Game Based Approach to the EFL Classroom." *BELT-Brazilian English Language Teaching Journal* 9, no. 2: 535-546. https://doi.org/10.15448/2178-3640.2018.2.31960

Daniau, Stéphane. 2016. "The Transformative Potential of Role-playing Games: From Play Skills to Human Skills." *Simulation & Gaming* 47, no. 4: 423-444. https://doi.org/10.1177/1046878116650765

Eseryel, Deniz, Victor Law, Dirk Ifenthaler, Xun Ge, and Raymond Miller. 2014. "An Investigation of the interrelationships between motivation, engagement, and complex problem solving in game-based learning." *Journal of Educational Technology & Society* 17, no. 1: 42-53.

Fine, Gary Alan. 1983. *Shared Fantasy: Role-Playing Games as Social Worlds*. Chicago, IL: University of Chicago Press.

Fischer, Klaus. [#ditz5227]. 2021. "Welcome and Rules." Discord Server TTRPG in Education. April 24, 2023.

Gee, James Paul. 2007. *What Video Games Have to Teach Us About Learning and Literacy.* Revised ed. New York: Palgrave Macmillan.

———. "Affinity Spaces and 21st Century Learning." *Educational Technology*: 27-31.

Gee, James, and Elisabeth Gee. 2012. "Nurturing Affinity Spaces and Game-based Learning." In *Games, Learning, and Society: Learning and Meaning in the Digital Age*, 129-153. Cambridge University Press. https://doi.org/10.1017/cbo9781139031127.015

Guest, Greg, Kathleen M. MacQueen, and Emily E. Namey. 2012. *Applied Thematic Analysis*. Sage Publications.

Halaczkiewicz, Marta Dominika. 2020. "Harnessing Writing in the Wild: Practical Applications of Affinity Spaces for English Language Instruction." *TESOL Journal* 11, no. 1: e00453. https://doi.org/10.1002/tesj.453

Hammer, Jessica, Alexandra To, Karen Schrier, Sarah Lynne Bowman, and Geoff Kaufman. 2024. "Learning and Role-Playing Games." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Holstein, J.A. and Gubrium, J.F. 2001. *Handbook of Interview Research: Context and Method*. California: Sage Publication.

Kilmer, Elizabeth, Jennifer Rubin, Michael Scanlon, and Jared Kilmer. 2023. "Therapeutically Applied RPGs to Support Adolescent Social Connection and Growth during the COVID-19 Pandemic." *Journal of Creativity in Mental Health* (July 31): 1–22. https://doi.org/10.1080/15401383.2023.2239703

Kvale, Steiner. 1996. *InterViews: An Introduction to Qualitative Research Interviewing.* London: Sage Publications.

Landry Games Studio. (@landrygames). 2020. "Twitter Profile." Twitter.

McGonigal, Jane. 2012. *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. London: Vintage.

Montola, Markus. 2008. "The Invisible Rules of Role-playing: The Social Framework of Role-playing Process." *International Journal of Role-playing* 1: 22-36. https://doi.org/10.33063/ijrp.vi1.184

National Oceanic and Atmospheric Administration. N.d. "Phenomenon-Based Learning Modules." Science On a Sphere.

Noddings, Nel. *Caring: A Feminine Approach to Ethics and Moral Education*. Berkeley, CA: University of California Press, 1986.

Plass, Jan L., Bruce D. Homer, and Charles K. Kinzer. 2015. "Foundations of Game-based Learning." *Educational Psychologist* 50, no. 4: 258-283. https://doi.org/10.1080/00461520.2015.1122533

Reznichek, Zach. (@teachergamerz). 2021. "Twitter profile." Twitter.

Ruslin, et. al. 2022. "Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies*." IOSR Journal of Research & Method in Education* (IOSR-JRME) 12, no. 1: 22-29.

Saldana, Johnny. 2021. *The Coding Manual for Qualitative Researchers.* Sage Publications.

Sederquist, Johny. (@mrsederquist). 2018. "Twitter profile." Twitter.

Shaw, Kienna, and Lauren Bryant-Monk. 2024. "TTRPG Safety Toolkit v. 2.5." TTRPG Safety Toolkit, April 10.

Stenros, Jaakko. 2012. "In Defence of a Magic Circle: The Social, Mental and Cultural Boundaries of Play." In *DiGRA Nordic 2012 Conference: Local and Global – Games in Culture and Society*, Tampere Finland, June 6-8, 2012, edited by Raine Koskimaa, Frans Mäyrä and Jaakko Suominen.

Tito, Greg, and Shelly Mazzanoble. 2018. "Dragon Talk: Teaching with D&D, 6/11/18." YouTube, June 11.

Thompson, Isabella. (@missiothompson). 2019. "Twitter profile." Twitter, April 23, 2023. https://twitter.com/missiothompson

Whitton, Nicola. 2018. "Playful Learning: Tools, Techniques, and Tactics." *Research in Learning Technology* 26: 26. https://doi.org/10.25304/rlt.v26.2035

Winardy, Gary Collins, and Eva Septiana. 2023. "Role, Play, and Games: Comparison between Role-Playing Games and Role-Play in Education." *Social Sciences & Humanities Open* 8, no. 1: 100527. https://doi.org/10.1016/j.ssaho.2023.100527

Yang, Keming, Kimberly J. Petersen, and Pamela Qualter. 2022. "Undesirable Social Relations as Risk Factors for Loneliness Among 14-year-olds in the UK: Findings from the Millennium Cohort Study." *International Journal of Behavioral Development* 46, no. 1: 3-9. https://doi:10.1177/0165025420965737

Zagal, José P., and Sebastian Deterding, eds. 2024. *The Routledge Handbook of Role-playing Game Studies*. London: Routledge.

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Playing with Leadership: A Multiple Case Study of Leadership Development Larps

Abstract: Learning and development solutions often contain some form of role-playing activity. Many live-action role-playing (larp) leisure events openly center their themes or story on leadership topics like conflicting visions, cooperation, or strategic decision-making. Despite this, only a few larps to date have dared label themselves as "leadership development" edu-larps.

This multiple-case study utilizes a synthesized theoretical framework that combines several typologies of both the leadership development research field and the fields of role-playing game studies, edu-larp, applied drama, and simulation. Four individual leadership development larps were identified, categorized by type, compared, and evaluated. The four cases have some striking similarities, as they all make use of the same learning cycle, have observers, and focus on developing versatility as a worthwhile leadership trait. Furthermore, all four larps have relatively few visible game mechanics, the hierarchical difference between characters is low and urgency or uncertainty is used to enhance learning.

The main difference between cases is the setting, where a modern business setting seems to be the default, but more fantastical settings, such as "samurai in feudal Japan" were also used. Character design also differs, from abstract roles to very-detailed personality descriptions. Framing, such as duration, varies from one 2-hour session through five sessions spread over weeks to a continuous 36-hour session. These and other identified differences and similarities highlight patterns to build upon by designers and gaps to fill with later research.

Keywords: case studies, leadership management, frame theory, larp, live action role-playing

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1. INTRODUCTION

Every activity has the potential to develop us in a casual, informal, tacit way (La Belle 1982). This is also true for leadership competencies, especially when considering social activities in which one can practice the management of attention, communication, influence, and decision-making.

This implies that a lot (if not most) leisure live-action role-playing games (larps) have latent leadership aspects embedded in their structure. Larps are a peculiar type of embodied role-playing game that emerged in the late 1980s from various sources and have expanded and evolved since (Harviainen et al. 2024). Larpers are aware of this developmental potential. There are best practice articles in the Nordic larp scene about how to lead during larps (Fischer et al. 2020) and how collaboration toward co-ownership is a form of leadership in itself (Rönnåsen 2022).

In addition, a lot of larps explicitly deal with leadership topics, either foregrounding them or using them as central overarching themes. Examples from the last decade include, but are not limited to: *The Climb* (2013) and *Perfection* (2019) from Bully Pulpit Games, *Witchwood Larp* (Red Feather Roleplaying 2013), *Anything for N.* (Turbolarp 2014), *Legion: Siberian Story* (Rolling 2015), *Cult* (Obscurus 2018), *Suffragette!* (Vejdemo et al. 2018), *Wing and a Prayer* (Allied Games 2018), *Lord of Lies* (Atropos Studios 2021), *A Meeting of Monarchs* (Charmed Plume Productions 2022), *Three Kingdoms* (Cyriax 2022) and *The Seekers* (Langland 2023). While these do not consider themselves formal leadership development (LD) larps, they still provide a fertile ground to experience rich instances of leadership that might easily lead to informal learning. Facilitators can also apply them in a non-formal learning setting to foster leadership development (Westborg 2023). For a summary, see Appendix 1.

Larps can be educational in at least two senses (Westborg 2023). Many leisure larps can be *applied* in an informal or formal educational setting for educational purposes. Meanwhile, some larps were *designed* to be educational in their gameplay, as opposed to being designed for leisure. While more loose interpretations of the term "educational larp" (or edu-larp) include the first sense (Bowman 2014), stricter definitions require that both the gameplay design and the framing design (application) of the larp should be focused on learning (Westborg 2023).

On the other hand, a lot of well-known leadership development interventions (LDIs) contain some form of role-playing. They utilize roles, situations, rules, props, and interaction to foster experiential or action learning (Agboola Sogunro 2004), but they do not originate from larps and do not use the term to denote themselves. Examples include basket-in challenges (Bass 1990), situational role-playing exercises (Guenthner and Moore 2005), improv theater (Gagnon et al. 2006, Visscher 2023), development centers (Hertz 2006), psychodramatic sessions (Lippitt 1943), leadership coaching (Lee 2003), socio- and applied drama (McLennan and Smith 2006), strategic scenario planning (Coates 2000), educational simulation games (Avolio et al. 1988), serious games (Buzády 2017), and gamified activities (Cebulski 2017).

To show that edu-larps can be novel and valuable leadership development interventions, one must present arguments and evidence on how edu-larp differs from other LDIs that involve embodied role-playing. This can be shown through their gameplay design. To position the edu-larp form in relation to other LDIs, in this article, we will look at how edu-larp interventions are designed to reach their goal, namely leadership development. The focus is on design considerations and their effects, not on how these leadership development larps can be applied and facilitated.

To further complicate this situation, it is rather easy to separate the content (the special type of role-playing activity, which we will denote from now as larping) from its game format (e.g., a larp). The former is a particular mindset and behavioral way of doing things that can be experienced and identified in other activities. J. Tuomas Harviainen (2011, 176) attempted to specify and distinguish this role-playing phenomenon with his criteria of *larping*:

- Role-playing in which a character, not just a social role, is played.
- The activity takes place in a fictional reality shared with others. Breaking that fictional reality is seen as a breach in the play itself.
- The physical presence of at least some of the players as their characters. (Harviainen 176)

In this sense, larping is a special type of role-playing, where participants enact individualized characters in a continuous and embodied manner. Larping happens at most larp events, while it can also exist at non-larp events (Harviainen et al. 2024 cite re-enactment, bibliodrama, and other activities). Without the intention to judge and qualify, we can safely say that on the other side of this space, there are extreme cases, specific larps where no actual larping happens, as players enact only social roles, purposefully break the fiction, or are all not physically present (Reininghaus 2021).

In summary, informal and formal leadership development includes interventions that often involve some form of role-playing. Taking into account interventions, some leisure larps can be applied or "framed" for leadership development. Moreover, there are educational larps that are designed for leadership development in terms of their gameplay. It is also possible to define a specific type of role-playing, an activity that is an embodied, undisturbed enactment of individualized roles, often found in larps, called larping. Considering all of this information, we propose a conceptual map (see Figure 1) that includes three sets:

»   Leadership development situations (with a subset of formal and informal leadership development interventions)
     »   Larps (with a subset of edu-larps in a strict sense, Westborg 2023)
     »   Role-playing activity (with a subset of larping, as defined by Harviainen 2011)

Figure 1: Leadership development, larps, and role-playing
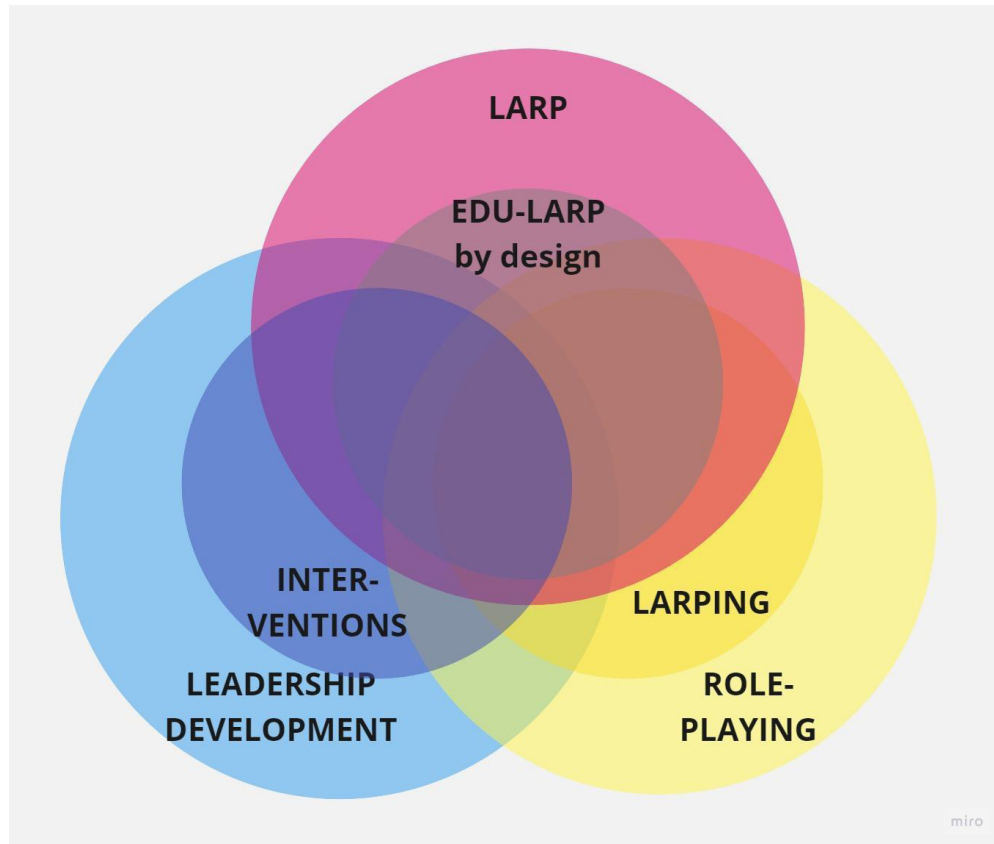
Source: by authors, based on Harviainen (2011) and Westborg (2023)

It is not immediately evident what the different cross-sections on this conceptual map might contain and categorizing individual cases would require thorough understanding of that case. For example, some edu-larps do not meet the criteria of larping (Harviainen 2011, Bowman 2014). Furthermore, there might be leadership interventions that fit the criteria of larping but are not labeled as (edu-)larps. Leadership development (edu-)larp(ing) is a very hazy phenomenon that needs further inquiry to be crystallized (Richardson 2000). A comparative design analysis might facilitate this process.

2. BACKGROUND

As the general audience of this journal is knowledgeable about larps, in the background section we mainly focus on giving a broad introduction to leadership and leadership development (LD) studies by summarizing relevant bibliometric and systematic literature reviews.

2.1 Leadership

Leadership is arguably the most widely debated and explored issue in management (Antonakis and Day 2017). Because different authors cannot agree on a single definition of the concept, it probably compromises more models than any other sort of behavioral research (Bass 1990). Yukl (2010) provided a comprehensive summary of the various definitions and formulated a definition that has now become the accepted standard of generalized leadership: "The process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives" (Yukl 2010, 26).

Historically, mainstream leadership research evolved in steps, each step hallmarked by a milestone leadership theory (Samul 2020). According to the oldest one, the Great Man theory, leaders are born with specific intrinsic qualities that make them inherently fit to lead (Carlyle 1993). The Trait hypothesis expanded on this premise by claiming that particular characteristics, such as self-confidence, honesty, and empathy, are more significant than others for leadership effectiveness (Stogdill 1948). Behavioral theory, on the other hand, focuses on leaders' actions rather than their inherent features, suggesting that good leadership can be learned via observation and imitation of successful behaviors (Lewin et al. 1939; Blake and Mouton 1964; Hersey and Blanchard 1977). According to the Contingency Theory, the most effective leadership style depends on the situation, and leaders must be able to modify their style to match the demands of their followers and the context in which they operate (Vroom and Yetton 1973; Fiedler 1974). Later, the Process-based Leadership theory stressed communication and cooperation, arguing that great leaders are those who can involve their followers in a shared vision and encourage them to work toward common goals (Graen and Uhl-Bien 1995).

Recent leadership theories are very diverse. Ethical leadership emphasizes leaders acting as moral role models and prioritizing the rights and dignity of others (Brown, Treviño & Harrison 2005). Servant leadership is centered around leaders serving the needs of followers and promoting their development (Greenleaf 1970). Humble leadership involves leaders acknowledging their limitations and fostering a culture of mutual learning (Owens & Hekman 2012). Transactional leadership focuses on exchanges between leaders and followers, rewarding performance (Burns 1978), while transformational leadership inspires followers to transcend personal interests for the group's greater good (Bass 1985).

Looking at leadership studies from the contemporary side, a bibliometric analysis of leadership studies identified two dominant themes in the literature: leadership development and leadership effectiveness (Vijayakumar et al. 2018). The content analysis on these two themes revealed six distinct lenses that shape the academic discourse: cultural, cognitive, learning, personality traits, social/relational, and political lenses. Others (Samul 2020) recently argued that the main topical clusters of leadership studies are leadership management, leadership performance, leadership models, leader's behavior, leader's personality, and team leadership.

Leadership in organizational contexts is usually contrasted with management and used in a narrow sense. This trend could be highlighted with two concepts. One is a famous statement from Peter Drucker, explaining that while management focuses on doing things right, leadership is about doing the right things (Cohen 2009). The other widespread interpretation is that leadership is one of the four managerial functions besides planning, organizing, and controlling (Koontz and O'Donnell 2004), heavily connected to, and influencing organizational behavior. Another line of thought links leadership with changes in the external environment and the capability of helping others adapt to change (Heifetz et al. 2014).

2.2 Leadership development

As David Day (2000) influentially distinguished, while leader development works at the individual level and develops human capital, leadership development (LD) is a broader category that works at the supra-personal (relational, team, group, or organizational) level and in return, develops social capital.

According to Bernd Vogel and his colleagues (2021, 1), "development of leaders and leadership is a formative research area and a considerable industry in practice," but it is also extremely fragmented. According to their findings, the dominant discourse is defined by journals such as *The Leadership Quarterly, Journal of Applied Psychology, Academy of Management Learning & Education*, and highly influential writers such as Bruce J. Avolio, David D. Day, and Robert G. Lord. Vogel suggests that the origins of the LD field can be found in practice, that it has grown around a single primary narrative, and that organizational behavior and leadership theory underpin the LD discourse.

Day et al. (2014) identified six main topics in leadership development. The *intra*personal, individual topics including experience and learning, skills, personality, and self-development, while *inter*personal leadership topics include social mechanisms and authentic leadership. With an even wider scope (Vogel et al. 2021), we can distinguish three main directions in leadership development research: its learning processes and their elements, leadership styles, and finally intra-person learning mechanisms.

Leadership development is an especially essential task in light of environmental and societal changes (Ey et al. 2021). Our present is often described as a volatile, uncertain, complex, and ambiguous (VUCA) world (Lawrence 2013). While some researchers suggest stoic calmness and negative capability as a solution to cope with radical uncertainty and turbulent changes (Hirsch et al. 2023), in agreement with Dave Snowden and Alessandro Rancati (2021), we believe that careful experimentation is a better fit to these situations. Moreover, leadership skills, styles, and solutions to slow-burning crises (Hart and Boin 2001) can be developed in the vocal and experiential spaces of larps and role-playing.

Role-playing in some form was probably always part of leadership development processes (Lippitt 1943). Bernard M. Bass (1990) enlists a couple of interactive methods that might develop leadership, including in-basket activities, living case games, simulation, behavior modeling, sensitivity training, and role-playing. According to him, "The purpose of playing a role, rather than reading or talking about a solution to an interpersonal problem without a script, is to improve learning and retention and to promote transference from the learning situation to the leadership performance on the job" (Bass 1990, 821).

2.3 Leadership development and larps

The Scopus database showed zero documents when we searched for "leadership" "development" and "live-action role-playing" in the article titles, abstracts, and keywords in the May and December of 2023. One conference proceeding (Hallander 2003) showed up for "larp" but it was about the Lean Aircraft Research Program (L.A.R.P.). When we broadened the search to include synonyms, we got twelve hits, but after manual evaluation, we found that most of the documents were false hits and only three (Bailey et al. 2022; Hjalmarsson 2011, Mercer et al. 2021) were somewhat connected to our research agenda.

Summarizing the Scopus findings, while Sara Hjalmarsson (2011) identified a significant potential in the "larp artform" to enhance scenario-based training in military leadership education in her explorative presentation, Jennifer Bailey and her colleagues (2022) promoted simulation-based

learning for school principals as a way to develop school leadership in their article. Based on the cognitive load theory (Sweller 2020), they argued that "the building of situational memory through role-playing helps leaders to be better prepared to face those situations when they arise in reality" (Bailey et al. 2022, 218) and role-playing simulations as an effective but passive approach compared to digital simulations.

Turning to the most relevant hit, Ian Mercer and his colleagues (2021) used Jason Morningstar's (2013) larp *The Climb* as a way to teach university students about "leadership, influence tactics, decision-making, conflict resolution, and communication" (Mercer et al. 2021, 71). Their article describes the game and the student reactions, compares it to other mountain climbing-themed management simulations, and makes suggestions about its usage. As a leisure larp that was applied in an educational context, instead of an edu-larp designed for learning, this case could be categorized as a non-serious game-based learning intervention or as an "RPG in education" (Westborg 2023).

A search in Google Scholar was more successful, it showed around 50 documents, where a dozen were found to be relevant, but nothing specifically about leadership development and larps. This list was supplemented by snowballing and editor suggestions. We do not attempt to conduct a comprehensive literature review about every article that briefly mentioned some element of our topic, as our current research is interested in design comparison. However, as a narrative review, we included every relevant source that has come to our attention.

Talking about leisure RPGs such as larps, Sarah Lynne Bowman (2010) mentions that these may require the players to take on leadership roles, and thus, practice the necessary skills such as holding others' attention, communicating efficiently, managing or mediating conflicts, maintaining cohesion, etc. Larp activities might offer practice opportunities that are unprecedented in real life, and encourage players to develop leadership competencies. Perspective-taking inherent in playing roles might also help in understanding others' points of view in group dynamics. She also cites simulation and applied improvisational drama as used in business contexts.

A systematic review on edu-larps (Bowman 2014) mentions that many organizations use role-playing activities to teach staff in areas such as teamwork and leadership and lists exercising leadership skills as a behavioral learning dimension of edu-larps. Bowman and Standiford (2016) also conducted a mixed-method study on middle school science students, collecting self-reports on five broad learning dimensions, among them leadership and teamwork. Although 13 students believed larp increased their leadership skills and 6 thought larp somewhat helped, student opinions of their leadership characteristics remained consistent. As the authors summarized their findings, "the data did not reveal significant changes in the areas of team work and leadership between the two time points, although several students offered examples in which these two factors were exercised during the course of the edu-larps" (Bowman and Standiford 2016, 5). To interpret these results correctly we must cite research that suggests that all larp participants gain leadership experience and confidence, even if they are unaware of it (LeClaire 2020). Designers and organizers also intuitively use management techniques to exert control before, during, and after play (Harviainen 2013). Another article briefly mentions managerial functions in the organization of role-playing and larp events and recommends the analysis of organizers' leadership styles (Túri and Hartyándi 2023).

Another book, *Imagine This* by Blaž Branc (2018), is probably the best expert writing on applying role-playing games in corporate and business contexts. Its analysis focuses strongly on Nordic larps. While the book mentions leadership aspects regularly, there is no specific chapter on leadership or leadership development, thus the topic remains mostly implicit.

The *Routledge Handbook of Role-Playing Game Studies* (Zagal and Deterding eds. 2024) does not list leadership in its index; however, the last chapter discusses the related topics of power,

control, and authority in role-playing games (Hammer et al. 2024). Ryszard Praszkier in *Empowering Leadership of Tomorrow* (2017) mentions larps in the chapter about exploring the future and briefly introduces the activity and the hobby. In his interpretation, larps can help to experience the "adjacent possible" (Kauffman 2000), thus linking it closer to horizon scanning and scenario planning than actual role-playing.

There are also numerous theses and dissertation texts connected to our topic. In his Ph.D. dissertation, Balzac (2016) did a grounded theory study on the transference of leadership qualities from a gaming setting to a non-game one. His findings suggest that larps may improve one's understanding of leadership, decision-making, and group functioning. Another good fit for our specific topic is a BA thesis from Maria Kolseth Jensen (2020) who utilized larps for leadership development at the Royal Norwegian Naval Academy. The results indicate that larps might contribute to role flexibility. Moreover, enacting challenging characters and a positive inclination toward larps influences the outcome of leadership development interventions (Kolseth Jensen 2021).

Another significant contribution to the topic of leadership development and applied RPGs comes from Joe Lasley, who researched role-playing games in leadership learning. His dissertation (Lasley 2020) examines the gaming environments in *Dungeons & Dragons* groups employing content analysis, group observations, and interviews for data collection and analysis. His findings suggest that the inherent power in leader-member interactions might serve as the foundation for a psychologically layered emotional container. He mentions that these results can inform the design of tabletop RPGs for leadership development. While his conceptual research (Lasley 2022) nominally focuses on all analog forms of role-playing games and incorporates theories and terms from the (Nordic) larp scene, his analysis is mostly relevant to tabletop role-playing games.

Samantha Funk's MA thesis (2021) reviewed and summarized what tabletop RPGs can offer for leadership development, highlighting the creative potential of the format. Also very valuable is the dissertation of Christina N. Mackay (2022) which discussed the perceptions of skill transference from *Dungeons & Dragons (D&D)* to personal, social, and work life from a leadership theory perspective. The qualitative study of an online *D&D* group revealed new learning capacities that were transferred socially to various life interactions in three main themes: skill identification, social interactions, and leadership skills. Thus, tabletop RPG campaigns can significantly enhance informal learning.

To summarize research concerning leadership development and larps, we can state that it is a relatively new topic. Several studies explored the potential for informal leadership learning in larps, both theoretically (Bowman 2010; Harviainen 2013; Bowman 2014; Hammer et al. 2018; LeClaire 2020; Sweller 2020; Túri and Hartyándi 2023), and empirically (Balzac 2016; Mackay 2022). Another line of research is interested in the application of tabletop RPGs (mostly *D&D*) for leadership development (Lasley 2020; Funk 2021; Lasley 2022).

The topics of edu-larps and leadership were also discussed concerning school principal development through simulations (Bailey et al. 2022), and military leadership education (Hjalmarsson 2011). Empirical research includes using edu-larps to develop middle school science students in general learning dimensions in a mixed-method study (Bowman and Standiford 2016), and leisure larp about mountain climbing to foster thinking about leadership topics in higher education in a case study (Mercer et al. 2021).

It can be concluded that larp designed or applied for leadership development is a topic that has been discussed and touched upon multiple times. However, as an intersection of different topics, it is still a highly under-researched topic, especially in terms of quantitative results.

3. METHODOLOGY

We decided to examine leadership development edu-larps using multiple case-study methodologies, because it is capable of revealing the characteristics of its objects (Guest, Namey, Mitchell 2013) by systematically analyzing a practical issue (Yin 1994), namely designing educational larps for leadership development (Westborg 2023), from multiple perspectives (Merseth 1994), and building or validating a theory (Yin 2003). Theoretical sampling, data collection triangulation, the logic of matching patterns, and analytical generalization can further enhance the validity of case-study methodology (Pauwels and Mattyssens 2004).

As the case study methodology is highly flexible, it does not have a widely accepted, fixed set of procedures (Yazan 2015). We followed the research steps recommended by Larry M. Dooley (2002) and Karin Klenke (2008).

1. **Defining the research question**;

2. **Case selection criteria**;

3. **Selection of data collection and analysis techniques**: collection triangulation and comparative framework;

4. **Data collection preparation and researcher reflection:** by paradigm awareness (above);

5. **Data collection**;

6. **Data analysis and interpretation**;

7. **Preparing the research report**; and

8. **Defining quality criteria:** validity and reliability (for data analysis).

Several of these categories are explaing in separate subsections below.

3.1 Research question

Leadership development edu-larps should be properly positioned in relation to other leadership development interventions that involve role-playing. Our research agenda is committed to finding a solution to this challenge using the research lens of design:

- How do leadership development edu-larps attempt to develop leadership through their design?

To break down our research question above, first, we look at the various goals of these leadership development edu-larps, considering what their goal structure is in terms of leadership development, how the gameplay design attempts to reach that, and what are the known results. Conducting a multiple-case study allows us to look at already existing examples and compare them.

While our research sheds some light on how the case studies have been applied, implemented, or deployed by organizations, our research focuses on design considerations. However, the design similarities and differences between the already existing leadership development edu-larps can be used to map out the possible breadth of the topic and highlight gaps.

Moreover, the comparative design analysis might be also used to evaluate if the cases promote or require larping (Harviainen 2011). Answering this question might further clarify or problematize the phenomenon of leadership development (edu-)larp(ing).

3.2 Case selection criteria

As we outlined in the introduction, delineating larps from other role-playing activities, and formal or non-formal leadership edu-larps from leadership-themed leisure larps are complex issues.

For this reason, first, we only searched for cases that defined themselves as leadership larps and deliberately omitted the examination of whether a larp contained true larping (Harviainen 2011) or some other form of embodied role-playing. This step excluded leadership development interventions that involve role-playing but do not define themselves as larps.

We attempted to collect all available cases on the internet that labeled themselves as leadership (development) larps. We started with our own two designs, and then searched through the internet, using search prompts and asking for advice and recommendations in related social media groups. We also networked at the Knudepunkt 2023 conference.

To meet our design-oriented research agenda, we utilized purposeful sampling (Creswell 2007) and the matrix developed by Josefin Westborg (2023) and kept only "educational RPGs"; cases that are education-oriented not just in their framing, but also in their gameplay design, as we are interested in cases that were designed for leadership development purposes from their conception, and not just applied afterward. This step excluded applied "RPGs in education" (Westborg 2023), for example, the university application (Mercer et al 2021) of *The Climb* (2013*), originally a leisure larp.

By the end of 2023, only four cases fit all of our case selection criteria. We considered whether to exclude cases that existed only on paper but had not been implemented, but as all four cases had been applied at least once, we did not find this as a meaningful filter.

3.3 Comparative framework

To answer our research question about the design considerations of leadership development larps, we created a comparative framework that underlines the differences and similarities of the different designs. This framework was combined from various models from different fields.

In the comparative framework, the first dimension is chronological, as it deals with analyzing and phasing the processes that unfold during the larps, from start to finish. From the simulation gaming field, we borrowed the widespread concepts of briefing and debriefing (Der Sahakian et al. 2015), pre- and post-simulation activities that surround the gameplay, and support raw experiences to be digested through the phases of experiential learning, generalized into theory, and finally into a plan of action (Kolb 2015). We used it to summarize from start to finish what happens during larps from a participant's point of view.

The second dimension separates the parallel existing levels observed during larps. For this, we adopted the three-layered approach to role-playing games created by Fine (1983) and fine-tuned by Barker (2005), Montola (2008), and Cullinan and Genova (2023). The three-layered structural model postulates that every role-playing game process has a primary, social, exogenous, or contextual frame inhabited by acting persons, a secondary, game, or endogenous frame inhibited by players, and a third, diegetic or imagined frame inhabited by characters (Montola 2008, 23). For example, a wooden shaft covered with foam and duct tape in the social layer can be used as a special tool that impacts "3 points of damage" in the magic circle of the game layer, and it is imagined as a runed steel sword in the diegetic layer. For our model of the three-layered structure in role-playing games, see Table 1. This

distinguishing of layers helped us to separate different aspects of the larps and, for example, see if the goals of the various layers are in synchrony or dissonance.

Table 1: Our model of the three-layered structure in role-playing games.

	Layer	**Space**	**Presence**	**Framework**
	social	physical & social consensus reality	as a person	personal purpose & social contract
	game	set design & game materials	as a player	game objectives & rules
	diegetic	pretense & imagination	as a character	character goals & diegetic fate/laws

Source: by authors, based on Fine (1983), Barker (2005), Montola (2008), and Cullinan and Genova (2023)

To further distinguish the larps, we also utilized a categorization from the field of Drama in Education (Bolton and Heathcote 1999), or more broadly, process drama (O'Neill 1995). These movements distinguish between three forms of play: protagonist play, meaning that one participant is in the spotlight, intra-group conflict play, and inter-group conflict play. Of course, all three forms can be composed of several types of activities.

In the third dimension, we applied Harviainen's (2011) criteria of larping to see the extent to which the cases meet them, i.e., the extent to which the design of these larps promotes, supports, or requires larping behavior.

Our framework was constantly redefined in interactive cycles, with categories being split and merged as the comparison of cases progressed. For the final comparative framework, see Tables 2, 5, and 6.

3.4 Data triangulation

To gain a deeper understanding of the cases, we attempted data triangulation by discussing details about the games with the designers both orally and in writing and collected relevant documentation.

3.5 Data analysis

Utilizing abductive reasoning (Lipscomb 2012), we analyzed the cases and refined the comparative framework in parallel. The full analysis consisted of three complete rounds:

1. Case processing according to the preliminary comparative framework;

2. Cross-analysis of the topics emerging from the processing of cases in each case; and

3. Systematic comparison with the final comparative framework.

To minimize bias, the co-authors cross-analyzed each other's games. To ensure reliability, we attempted to report the results in an analytical approach that does not conceal inconsistencies (Gall et al. 1996).

4. RESULTS

The result chapter contains the description of the cases and four leadership development (LD) larps. We outline the concepts, design aims, and known results of all cases, and detail the analytic dimensions of the comparative framework, namely the processes, the layers, and the larping (Harviainen 2011) aspects of the four larps. See Table 5 for a summary.

Table 2: Our comparative framework

Dimension	Main question	Framework	Author(s)
Process analysis	What is the process of the larp?	Briefing, Debriefing	Der Sahakian et al. (2015)
Layer analysis	How do the goals of the different layers relate to each other?	Three-layered approach	Fine (1983), Barker (2005), Montola (2008), Cullinan and Genova (2023)
		Forms of play	Bolton and Heathcote (1999), O'Neill (1995)
Larping analysis	Does the design of the larps promote, support, or require larping behavior?	Criteria of larping	Harviainen (2011)

Source: by authors

4.1 Case 1: *7 Samurai* (*7Samurai*), an Assessment Center larp

4.1.1 Concept

In medieval Japan, a handful of desperate peasants pretend to be samurai to save their village both from rebel bandits and a greedy emperor. Influenced by Akira Kurosawa's *Seven Samurai* (1954), in this edu-larp, 5-7 players go through eight diegetic challenges as part of a four-hour-long assessment center (AC), where as a result, the assessors choose one of the candidates for the proposed job.

4.1.2 Aim

The design attempts to gamify AC processes to help participants display their leadership potential fully, as the roles and the overarching narrative that connects the tasks create an *alibi* (Montola 2010) to play outside of one comfort zone. Also, the variety of challenges in the immersive narrative makes it more difficult for the candidates to "look nice" as they have less time to think and behave manipulatively, thus leading to more transparent and accessible behavior.

Table 5: Basic information about the cases.

Year	2015	2020	2023	2023
Main Designer(s)	*7Samurai*, Ziga Novak, Blaz Branc	SPGR, Maria Kolseth Jensen	*Groundhog*, Mátyás Hartyándi	*MoveOn*, Gijs van Bilsen, Vanes Spee
Leadership theory	Team roles theory (Belbin)	Systematizing Person-Group Relations theory (Sjøvold)	Jacob L. Moreno's role theory (Lippitt)	Situational leadership (Hersey & Blanchard) & Core quality quadrants (Offman)
Applied as	Assessment center demo at an HR conference	Part of the curriculum of the Royal Norwegian Naval Academy (RNNA)	Demo for OD consultants, university training for engineer uni students, leadership development intervention for mid-level managers, demo at ISAGA Conference	Open training for leadership development
Target groups	Job candidates / HR	RNNA 1st year cadets	Playset dependent	Individual managers and directors
Duration	4 hours	70 minutes / larp, 5 sessions	2-3 hours	2 hours/participant (intake) 36 hours (training) 2 hours/participant (aftercare) 4 hours (return day)
Roles	1 GM facilitator, 3-7 players	1 GM facilitator, 4 players, 2-4 observers	1 facilitator, 2-3 players + 1-15 observers/ scene	2 GM facilitators, 2 executive coaches, 4-6 actors, 8-12 players
Setting	Feudal Japan	Modern-day organizations	Modern-day organization	Modern-day organization
Situation	Defending the village from bandits and the Emperor's army	Group meeting to come to a solution for that problem	Playset-based, dyadic advisor-manager situations	Company retreat of Move On, a fictional travel company
Characters	Peasants pretending to be samurai	Board members of a company, pensioners, and workers	Managers in an organization	The management team of Move On

Source: by authors

4.1.3 Results

This larp was run during the "Gamification in HR" conference in Ljubljana, Slovenia, in 2015 for HR professionals. One designer mentioned that during the conference run, against a dominant participant who was gradually losing ground, a quiet player slowly gained influence during the tasks, and for the last task, the other players elected him as a representative without external pressure. Thus, the structure and pace of the larp helped natural leadership to emerge.

Based on anecdotal feedback from the participating HR specialists (Branc 2018), the design reached its goal; job candidates behaved much more relaxed as they forgot that they were assessed. This provided significantly deeper insight into their hidden side and personality than standard AC. However, the facilitation workload proved to be very high and complex. In return, the design was adjusted to decrease the facilitator workload, and fit development center needs as well.

4.1.4 Process analysis

After a short AC briefing, the larp starts with what farmers do best, building a defensive wall, but the challenges gradually become more strategic in nature. The facilitator enters the game in non-player-character (NPC) roles ("an errand boy, a delivery servant, a lonesome wanderer, the chieftain of the rebel army," Branc 2018: 135) to deliver new tasks and instructions in a diegetic way, without breaking the flow of the story. Tasks could be set according to the purpose of the AC. During the larp's demo run, each of the eight tasks aligned with a particular leadership skill based on Belbin's (2012) team roles theory. After each task, the lights dim for three minutes during a "good night" phase to allow participants to rest a bit or write a self-reflective journal, and assessors have time to make their evaluations. The final task is a negotiation with one party chosen by the players: the rebels or the emperor's army. The designers state that there is one correct answer here. They argue that choosing the rebels is the right decision because emperors do not bargain with peasants. Standard AC debriefing closes the event.

4.1.5 Layer analysis

On the social layer, individuals might want to participate in this AC larp to get hired or to get familiar with the larpified AC process as an HR recruiter. On the game layer there is an undefined but existing win-state, so players might be competing with each other to be the "winner" in the eye of the assessors, thus getting hired. On the diegetic layer, the characters are Japanese peasants who must cooperate against external threats.

4.1.6 Larping analysis

Based on Harvianen's (2011) criteria of larping, we see that characters are presented to the players as societal roles, distinguished only by simple Japanese names. This is done on purpose, to give each player the same clean sheet to work with. While players might develop a specific character out of these prompts, the goal of these design decisions is to let the personality of the participant shine through the role-play and reveal the "real" character of the job candidate in the AC (Branc 2018).

The shared reality (a village in medieval Japan) is present too. It is slightly but occasionally broken by design, with the "good night" rule, to encourage self-reflection. However, this is presented as a diegetic phase, which makes the break relatively light.

The third criterion is unequivocally present. While there were external observers to the larp, all the players were physically present as their characters.

4.2 Case 2: *Apple Pie Factory, Housing Association, and Launch Party* (SPGR), short larps for the Norwegian Navy

4.2.1 Concept

- An apple pie factory is on the brink of bankruptcy and a crisis team of four or five board members meet to discuss what to do.

- Seven or eight pensioners of a housing association are gathering to settle a huge problem: children are playing loudly and making too much noise!

- An alternative medicine company is launching a new product and four to five employees are planning the launch party.

These three short larps are based on the Spin Theory of teamwork and team leadership (Sjøvold 2007), centered around decision-making and group processes, and were played by the same groups over five sessions.

4.2.2 Aim

These larp sessions served to help cadets of the Royal Norwegian Naval Academy (RNNA) develop role flexibility and were part of the master thesis research of their designer. The plot and setting for all three larps are intentionally simple, with a funny twist, for the characters to be more accessible to the players. It puts the focus on the characters and their interactions.

Observing is used as the main part of the design. Learning to look for certain dynamics and behaviors is also valuable to learning, as is playing. For the apple pie factory and housing association half of the group observed and the other half played.

4.2.3 Results

To test the usefulness of larp as a learning method for leadership development training, the results measure three hypotheses (Kolseth Jensen 2021):

Hypothesis 1: "The cadets will become more role flexible after completing five larp sessions" was partially accepted, as the participants had a positive development, which did not differ significantly from the control group.

Hypothesis 2: "The cadets who are positively inclined towards the larp sessions and choose to play characters that challenge them will have the greatest development in their spectrum of behaviours" was fully accepted.

Hypothesis 3: "The cadets who are positively inclined towards the larp sessions will have the greatest development in their ability to observe situations and select an appropriate behaviour" was fully accepted.

4.2.4 Process analysis

During the sessions, three different larps were played, with two larps being played twice. Each session lasted just over an hour and consisted of an introduction, a workshop (20 minutes), the roleplay itself (30 minutes), and a debrief (20 minutes). The workshops were designed to include a warm-up exercise (such as stretching or improvisational theater exercises to train spontaneity), and character building, where players got to know their own and each other's characters and build relationships between the characters. Finally, meta-techniques and the structure of the larp were explained.

During play, the game master was present at the beginning but then announced they would leave and return in 25 minutes, leaving the participants room to role-play amongst themselves. The debrief made use of both structured and open discussion, with specific attention being paid to the distinction between the player and the character and the learning points of the player. Role flexibility was the main topic of the structured part of the debrief, with questions from the theoretical framework of the larp.

4.2.5 Layer analysis

On the social layer, individuals joined the larp as RNNA cadets for personal and team development, especially role flexibility. On the game layer, players must cooperate in finding a solution to a problem in a short time. On the diegetic layer, characters are from the same community or organization and they are competing and collaborating at the same time to reach some consensus or compromise.

4.2.6 Larping analysis

In the case of SPGR all three criteria of larping (Harviainen 2011) were met. Participants played individual characters, which all held similar societal roles, but differed in their outlook on the problem. The character sheets included names, titles, SPGR categories, typical behaviors, personal goals, relationships, and suggested actions, providing rich instructions and strong affordances (Gibson 1977) to enact complex characters.

During playtime, the fiction was not broken in two of three designs. In the short larp called *The Launch Party* there was a meta-technique where players could say their inner thoughts out loud. In a sense, this can be seen as breaking the fiction, as these monologues could be heard by the players, but not their characters. Not breaking the fiction was relatively easy as the playtime was short (around 30 minutes) and sandwiched between reflective exercises

Finally, although in some sessions half of the participants were observers instead of players, all characters were physically present during play.

4.3 Case 3: *Groundhog Leadership Experiment* (*Groundhog*)

4.3.1 Concept

A difficult and tense conversation has just come to a standstill between a decision-maker and an advisor when suddenly, time jumps back to their original starting sentence. Realizing what just happened, this time, their exchange might be different! The duo must revisit the same situation at least five times to break from the time loop.

The *Groundhog Leadership Experiment* (2022) is a leadership development role-playing game used in training and education contexts. The game design originates from a hybrid role-playing game scenario, *Memento Morrison*, that ran for the Otto award in 2021 at the Fastaval scenario competition in

Hobro, Denmark. It borrows heavily from the movie *Groundhog Day* (1993), and dramatic techniques invented by Jacob L. Moreno (Lippitt 1943). The current, professional version has been used five times up to date.

4.3.2 Aim

Participants are invited to observe and interact with different dyadic leader-follower situations, revisiting intense interpersonal encounters multiple times, and utilizing the process of rapid improv prototyping. Because they replay short scenes at least five times in a row, they can witness how their decisions and word choice impact the outcomes. This creates a brave laboratory space for behavior experimentation, aiming to exploit experiential learning and foster change readiness, mastery learning, and role creation. While the two active role-players negotiate the problem, the observers collect punchy statements and one-liners that might summarize the leadership situation succinctly. The group is collectively responsible for finding a shared lesson learned or motto after each scene.

4.3.3 Results

This larp has positive, but mostly anecdotal results so far. First, it had a successful demo at a well-established Hungarian consulting firm, making it into the organization's L&D portfolio and being utilized during a leadership training intervention for mid-level managers in 2023. It was also invited to be part of the "Project Leadership & Management 2" course at Széchenyi István University, Hungary, where at its first run, students anonymously rated it high, however, the low number (n=4) of participants severely limited the validity of these results (see Appendix 2). These suggest that while participants were engaged, felt safe, and learned both about leadership and themselves, however, they were not warmed up enough for truly transformative experiences, so the intervention could be fine-tuned in this direction. The game was further tested and evaluated by gaming simulation researchers and experts at the ISAGA 2023 conference, who praised its elegant design, the way the simple and easy-to-understand game elements create "a variety of options," unfolding complexity, and how it allows both passive and active learning while the whole experiential learning cycle is utilized.

4.3.4 Process analysis

The briefing consists of a short introduction and warming up sequence by sociometric techniques, and a formal onboarding to the game's concepts, goals, and rules. The participants shift between leader, follower, and observer roles in every scene. When a participant becomes a protagonist, he takes the role of the advisor and chooses an archetypical leadership scene to explore and another participant to play the decision-maker. Others are observers looking for catchy spoken sentences that could well represent the scene. The leader-follower duo replays the scene five times, the opening line from the follower being fixed, each replay consisting of exactly five sentences.

     Between replays, the leader can use "lifeline" cards to change the rules of the next replay. This way, a third role can sometimes enter play. After five replays the observers share the best lines and the group collectively chooses one as their motto for the scene. After playing enough scenes, each participant merges the mottos to create a personal moral or lesson about leadership. The debriefing contains two phases: a sharing of personal experiences by sociometric techniques and semi-structured questions, and a short expert evaluation session using the Critical Response Process developed by Liz Lerman and John Borstel (2003).

4.3.5 Layer analysis

On the social layer, individuals join the larp for personal development, but sometimes in a compulsory way. On the game layer, players are cooperating to extract punchy statements from the scenes on the subject of leadership and then work individually to construct their own personal takeaways from these. On the diegetic layer, the protagonist advisor attempts to influence the antagonist decision-maker to make a consensual decision.

4.3.6 Larping analysis

Groundhog Leadership Experiment does not meet two out of three criteria of larping (Harviainen 2011). First, roles are not referred to by name, but by position, and participants rotate between them, similarly to sociodrama (Galgóczi et al. 2021). The role descriptions are attitude spectrums with references to well-known advisors and consultants at the extremes of the scale, to foster behavior experimentation. It is debatable to what extent the role rotation and the short role instructions push participants to go beyond social roles.

    Groundhog is deliberately designed to break the fiction multiple times in short intervals, by changing the rules between each replay of the scene, and to achieve meaningful, substantive dialogues.

    While all active players are present physically in their roles, which formally fits the third criterion, two or three players are usually a minority compared to a large number of involved observers.

4.4 Case 4: *MoveOn* (*MoveOn*), a two-day self-contained Leadership development training

4.4.1 Concept

The management team of *MoveOn*, a struggling contemporary travel organization, goes on a two-day company retreat to solve their problems and become profitable again. However, each member comes with their personal plans and goals. Will they manage to reconcile them? This larp for leadership development is a personalized learning experience for individual managers and directors. Their learning goals were individually collected and roles were written specifically for them, based on those stated goals.

4.4.2 Aim

This larp aims to help the participants broaden their repertoire of leadership skills and work on their individual learning goals. The trainers designed the larp to be an intense experience that uses bleed as a deliberate learning tool. Hugaas (2022) defines bleed as "The RPG concept bleed describes the spillover of physical states, mental states, physicality, values, opinions, and other similar concepts from player to character and vice versa." Individual learning goals included things like learning to state boundaries, dealing with backhanded, political behavior, or positively using hierarchical power.

4.4.3 Results

While data was collected about the larp at three points after the larp, the authors are awaiting ethical review. Therefore, we reserve sharing these results for future work.

4.4.5 Process analysis

In the months leading up to the training, participants had one intake to determine their leadership goals and one intake to work on these goals with their coaches. They also had two possibilities of reacting to their role as written to propose changes. On arrival, the participants were asked to change into the costumes of their characters. A half-hour in-game session where the actors took the brunt of the interaction on their shoulders showed the participants how the larp would work. After that, there were 5 hours of workshops, focused on learning to roleplay, getting to know each other, and getting familiar with their character.

Time in-game lasted for 17 hours, with 1 hour of group reflection on the morning of the second day. In the meantime, all participants had at least one 1-on-1 session with their coach and could ask their coach for feedback during the larp. At the close of the two-day session, we had 3 hours of debriefing. Later, the participants could reflect with their coach and they had an evaluation session with the trainers. A follow-up session was planned 6 months afterward, to refresh the learning points.

4.4.6 Layer analysis

On the social layer, individuals sign up to the larp for personal development. On the game layer, players cooperate and attempt to lift each other (Vejdemo 2018). On the diegetic layer, characters are organization members who are competing and collaborating in an intra-group conflict.

4.4.7 Larping analysis

MoveOn uses fleshed-out, individual characters tailored to participant needs and learning goals.

For most of the playtime, the fiction is not broken. However, during runtime, there are several moments where the fiction is deliberately broken to allow for reflection on the fiction. This is both done collectively and individually. Beforehand, the design was to keep the fiction intact, except for these reflection moments. However, during play, both participants and actors (NPCs) asked for replays of scenes that involved just one or two players, so that these players could get more learning potential from these scenes.

All played characters were physically present during the game. Thus *MoveOn* met two criteria of larping out of three (Harviainen 2011).

5. DISCUSSION

5.1 Differences and Similarities

This section outlines the design differences and similarities between our cases, four leadership development (LD) larps. While the leadership development theories, goal structures, the framing of gameplay, and the depth of character design show striking discrepancies, recurring patterns among cases are the usage of real-life settings without props, thin game layers, high replayability or variability, and utilizing urgency and/or VUCA aspects. Common aspects in all cases constitute the ideal of the versatile leader, relatively low hierarchy, the structural support of the experiential learning cycle, and observer roles.

5.1.1 Leadership development theories

While there are similarities between the aims and underlying concepts of the leadership development theories behind the cases, all larps utilized different models. Case 1 (*7Samurai*) is based on the HR institution of assessment centers and Belbin's team roles theory (2012). Belbin's role theory identifies nine team roles, categorized into action-oriented, people-oriented, and thought-oriented roles, each essential for effective team performance. Case 2 (SPGR) uses Systematizing Person-Group Relations (SPGR) theory. SPGR is a framework that analyzes interpersonal dynamics and role behavior in groups, focusing on systematizing relationships to understand group functioning and development (Sjøvold 2007). Case 3 (*Groundhog*) is based on Ronald Lippitt's concept for dramatic leadership development. Lippitt's dramatic leadership development emphasizes stages of group development and leadership styles, highlighting how leaders can adapt to group needs and dynamics for effective management (Lippitt 1943). This concept, in turn, is based on Jacob L. Moreno's role theory, which explores how individuals assume and perform different roles within various social contexts, using role-playing as a method to study and improve social interactions and personal development (Moreno, 1962). Case 4 (*MoveOn*) utilizes the core quality quadrant model (Ofman 2006) to develop situational leadership (Hersey and Blanchard 1977). Just as there are many different leadership theories, there are many different leadership edu-larps.

5.1.2 Goal structure

We found the most significant diversity among the cases in terms of their (latent) goal structures (see Table 6). On the *social layer, the personal purpose* of participants in Case 1 (*7Samurai*) might be to get hired as a result, or, for an HR staff, to experience the edu-larp intervention as participants first, to utilize it later as an assessment center. In the other cases, the purpose is personal (and in Case 2 (SPGR), as a navy crew also a real-life team-level) leadership development.

There are more differences in the *game layer*. In Case 1 (*7Samurai*) players compete with each other to win a real-life job, making it a player versus player (PvP) larp. In Case 2 (SPGR), players attempt to create a common goal and become a team. Case 3 (*Groundhog*) aims to foster behavior experimentation through repetition, trying out new approaches, finding new solutions to archetypical problems, and summarizing the experiences into statements about leadership through projective techniques. The *object of the game* (Baker 2013) in Case 4 (*MoveOn*) is learning together and for this, the larp utilizes workshops to help players collaborate in playing to lift (Vejdemo 2018).

On the *diegetic layer,* we discuss *character goals.* Case 1 (*7Samurai*) is exceptional again in the sense that it is an intergroup conflict between the characters versus an unseen threat, making it a Character vs Environment (CvE) situation. They are told that they win or lose as a group. This case is also special because the designers think that there is an optimal final choice and thus, a secret winning condition. In the last task, when the samurai have to negotiate with one of the threats, designers think that it is best to choose the rebels and try to make them an ally, as emperors never negotiate. These are in striking contrast with the other layers and their goal structure. Case 2 (SPGR) and Case 4 (*MoveOn*) are intragroup conflicts plotwise. In Case 2 (SPGR) characters pursue their own goals, however, this does not necessarily lead to competition with others. Instead, usually a mix of cooperation and competition, in other words, co-opetition happens during the negotiation process. This is also true for Case 4 (*MoveOn*) but on a more complex level. Here character goals are designed to fit participants' personal developmental goals, and around 50% of these goals are attainable during the game, the others are process goals. The character goals are aligned in a way that every character can feel that they are gaining something. The two-day game time offers many opportunities to pursue personal agendas

and make meaningful decisions about cooperation or competition. Case 3 (*Groundhog*) is also an outlier. Here, there is only one protagonist in every scene, and the whole situation centers around their interpersonal relationship with the antagonist, sometimes supplemented with a third, supporting character. There seem to be countless possible variations of layers and goals.

Table 6: The goal structure of the cases in the three-layer model.

Case	1 (*7Samurai*)	2 (*SPGR*)	3 (*Groundhog*)	4 (*MoveOn*)
Social layer	get hired/learn the process by experience	personal and team development	personal development	personal development
Game layer	hidden competition to win (PvP)	cooperation in finding a solution	cooperation in exploration & summarization	cooperation in playing to lift
Diegetic layer	cooperation in an inter-group conflict (CvE)	co-opetition in an intra-group conflict	co-opetition in the protagonist plays	co-opetition in intra group conflict

Source: by authors

5.1.3 Gameplay framing

There is also much diversity along the dimension of framing the gameplay. Case 1 (*7Samurai*) is a short, continuous larp with several tasks framed softly by the facilitator in a diegetic role. The assessment tasks or scenes are separated by "nights," the dimming of lights, when assessors can take notes and participants can freely reflect. Case 2 (SPGR) larps are also short and continuous, however, two of them are repeated twice. They lack the inner structure as they are more like uninterrupted long scenes. Case 3 (*Groundhog*) uses hard scene framing techniques, and each scene is replayed with possibly different outcomes at least five times in a row. The gameplay phase of Case 4 (*MoveOn*) is one unstructured continuous play, however, the corporate setting makes it possible to insert scenes diegetically as meetings.

In terms of creative freedom and player agency, as Case 1 (*7Samurai*) is an assessment center (AC), it limits the creative freedom and agency of players on a situational level, meaning that they can influence the action in progress, but not the assessment center process. Case 2 (SPGR) larps were 70 minutes, one scene larps, they allowed much less room for players to go off track. Within the confines (set location and two-day time period) of Case 4 (*MoveOn*), players had a large amount of creative freedom. They were allowed to come up with new relevant facts as long as they did not contradict established ones. They could alter the structure of the larp (for example, they decided to fire the diegetic facilitator and change the proposed timing of several items on the agenda. This led to a high experience of agency for the players. However, game masters still had the final say on what happened on a larger scale, as the players could only affect their characters and not create outside events. While Case 3 (*Groundhog*) was much shorter in time and scope, it allowed a lot of creative freedom within the confines of the short scenes as players had to replay them at least five times, nudging them toward experimentation and trying out different approaches.

5.1.4 Real-life setting without props

Only Case 1 (*7Samurai*) is not set in a present-day, real-life, organization-based situation. It is set in medieval Japan, and players play Japanese peasants who pretend to be samurai to protect their village. This feature distracts the participants from the fact that they are evaluated in an assessment center, connects the various assessment tasks into a diegetic narrative with an arc, and also provides an alibi to deviate from everyday behavior. In terms of stage setting and props, Case 4 (*MoveOn*) is the outstanding one. All the other cases could be played nearly anywhere, as they do not use props and place little thought toward the stage setting. Case 1 (*7Samurai*) uses tools as game material, but they are symbolic. Building a "wall" with stone bricks is not building a wall. By contrast, Case 4 (*MoveOn*) makes use of an environment that is the same diegetically as in the real world (a holiday home where the company retreat is being held) enhancing spatial involvement (Calleja 2011) or environmental immersion (Bowman 2024). *MoveOn* also uses props that are diegetically present, such as the company website, yearly reports, and different clothing for the characters.

5.1.5 High replayability or variability

Case 4 (*MoveOn*) is not easy to replay with different people, as the characters are tailor-made to the participants' leadership development goals and the game takes two full days plus intake and follow-up. All the other cases are on the opposite side of the replayability spectrum. Case 1 (*7Samurai*) as an assessment center larp is not intended to be replayed by the same participants; however, the possible assessment tasks can be chosen from a pool to correspond with the assessed competencies. Case 2 (SPGR) larps are very short, around 70 minutes each, and easy to play with other groups. It is interesting to note that while two of the three scenarios were repeated twice during the research, participants gave the feedback that they would like to play five different scenarios. Contrary to this, Case 3 (*Groundhog*) is designed around replayability both in the sense that the same participants should enjoy and learn from revisiting scenes multiple times, and also in the scene, that while the default starting sentences of the scenes make it easy for any group to start playing, these scenes can be easily changed to fit the development goal of the participants, as it was shown in the refitting of the consultant protagonist role to engineer in the university setup. Case 1 (*7Samurai*), Case 3 (*Groundhog*), and Case 1 (*7Samurai*) are both around 4-hour-long including briefing and debriefing, thus can be easily fit into a half-day slot.

5.1.6 Urgency & VUCA aspects

The different cases make use of a diegetic crisis or the feeling of urgency to drive the game. Case 1 (*7Samurai*) does this most explicitly, with enemy forces about to attack the player character's village. In Case 4 (*MoveOn*), the larp starts with a meeting where the boss says it is not going well and she will step back if the character can reach trust within the short period of the two-day company retreat. This urgency is heightened during the larp with a deadline, as a hostile takeover bid is introduced. Case 2 (SPGR) uses three larps, one of which is about a factory in crisis, on the brink of going bankrupt. The second larp is more whimsical, with pensioners facing a crisis of children making too much noise while playing. The final larp is about a launch party for a product, which is not a crisis, but has a high sense of urgency. In Case 3 (*Groundhog*), all standard scenes have complex, moderately high stakes (firing employees, restructuring organizations, etc.), however, the feeling of urgency is reduced due to the constant replaying of scenes.

To enhance the feeling of crisis, most of the cases have elements of the VUCA world (Lawrence 2013). Case 1 (*7Samurai*) is the most *volatile* and chaotic, as it is placed in a warlike situation. Due to its

length, Case 4 (*MoveOn*) has the most *complexity* and *ambiguity*, because of the large creative freedom and player agency. *Uncertainty* is present in all cases, moreover, the goal of Case 3 (*Groundhog*) could be interpreted as offering a remedy to uncertainty by reducing it through replay.

5.1.7 Thin game layer

Larps often do not contain the equivalent of tabletop RPG character mechanics and have only a few game procedures (Harviainen et al. 2018). This is true for all of our cases as they have a very thin, close-to-zero game layer. Except for a simple token voting system in Case 1 (*7Samurai*), an inner monolog meta-technique in Case 2 (SPGR), and the special cards in Case 3 (*Groundhog*) that can be used to influence the replay of the scenes, we found no game mechanics. However, these special cards are used between replays by the protagonist and have no diegetic equivalent (like a latex sword prop would have a diegetic equivalent of a steel sword in a fantasy larp). Thus they do not belong to the character; they are used purely as a game mechanic.

5.1.8 Low hierarchy

In all cases, the main focus is on leadership within a relatively low hierarchy. Case 1 (*7Samurai*) and Case 2 (SPGR) are about groups of equals with minor differences. In Case 3 (*Groundhog*) while the antagonist role (by default, the manager) is always in power, the protagonist role is an advisory one (an external consultant by default). Even in cases where the protagonist plays a subordinate (e.g., as in the engineer's playbook), their trusted advisory role as experts puts them close to the manager in terms of power distance. Case 4 (*MoveOn*) does have scenes with subordinates as well, but the main focus is on a group of senior managers with minor hierarchical differences.

5.1.9 Structural support for the experiential learning cycle

All leadership developmental larps utilize the experiential learning cycle (Kolb, 2015). They start with briefing and workshops, thinking about learning goals, and conceptualization of the setting and characters. Within the larp, active experimentation and concrete experimentation are combined. All larps have a debrief or reflective observation (either during or after the larp, or both). Finally, the experience is conceptualized into real life again. This final step was present in all cases explicitly.

5.1.10 Developing a versatile leader

All analyzed larps share the underlying assumptions that successful leaders have to be versatile in their behavior and that this could be achieved by developing (or evaluating) role flexibility and expanding the repertoire of roles the participants can enact. In Case 1 (*7Samurai*), players have to show their different sides in a wide range of challenges to be selected from the candidates for the job in the assessment center. In Case 2 (SPGR), characters are designed to mirror group functions borrowed from the SPGR theory (Sjøvold 2007) which posits that group functions need to circulate or "spin" between the participants to have a developing effect. Case 3 (*Groundhog*) actively pushes players toward behavior experimentation to try out different approaches and leadership styles. This is achieved by two-sided roles with behavior spectrums and through the mandatory replaying of scenes. Case 4 (*MoveOn*) is based on situational leadership theory (Hersey and Blanchard 1977) that posits different employees are better led through different leadership styles (directing, coaching, supporting, or delegating) and a leader benefits from using these different styles, depending on the environment they are in.

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5.1.11 Observer roles

There is a strong common theme of utilizing observer roles to evaluate or summarize player behavior among the analyzed larps. As Case 1 (*7Samurai*) is an Assessment Center, it has observer roles by default. In Case 2 (SPGR), for every active character role, there is also an observer role with an equally complex observer sheet, containing tasks and goals about observing and evaluating a particular player. In Case 3 (*Groundhog*), the character design for the observer role follows the same structure as for player roles but their goal is quite different. Observers here are tasked with collecting and writing down spoken lines that could summarize the meaning or moral of the situation. Case 4 (*MoveOn*) has two hired executive coaches in the staff who observe the situation in non-diegetic roles, meanwhile, the five organizers do the same but usually in diegetic roles. The lack of an observer role might be a great loss in terms of learning outcomes.

5.1.12 Requiring and promoting larping

The cases vary a lot in terms of meeting or supporting to meet the criteria of larping (Harviainen 2011). For example, in character design, Case 1 (*7Samurai*) uses only social roles but states that game duration and immersion support players in developing their characters. Using "tabula rasa" characters that have only names and no psychological depth is crucial here, as it provides an equal chance to each candidate in the assessment center. Case 3 (*Groundhog*) presents roles not as fleshed out, specific characters, but as nameless behavior spectrums with a position and a specific goal. While this character framework is more nuanced and specific than a social role, it is debatable whether Case 3 meets the character criteria for larping, especially because the roles shift between participants in every scene. Case 4 (*MoveOn*) uses premade, fully-fledged characters based on the player's learning goals, leadership style, and personality matrix, and the character's names, positions, and associated tasks, goals, personality, background history, and relationships that are based on participants casting choices. Case 2 (SPGR) is similar, as their character sheets have names, titles, SPGR categories, typical behaviors, personal goals, relationships, and suggested actions, however, these are not tailor-made to fit participants' needs.

The last aspect, the suggested specific actions, are very similar to Powered by the Apocalypse *moves*. "[M]oves give structure and a certain order to the players' conversations"; they "represent qualities that all the characters share, that we can use to compare them, and the basic moves are how the characters express them" (Baker 2020). These action lists offer perceivable possibilities for action, or in other words, affordances to play (Gibson 1977). This feature distinguishes Case 2 (SPGR) from general role-playing training situations where having names, ages, positions, goals, and relationships is the norm (Rudas 2007).

In all cases, at least some of the characters were physically present, so in this aspect, the researched cases can be called larps and vary from other forms, such as tabletop role-playing games. However, every case had at least a small way of breaking the fiction. In SPGR this was only done in one session with a meta-technique and the other three cases all deliberately included a breaking of the fiction to increase reflection by the participants and therefore enlarge the potential learning effect of the intervention.

Overall, none of the four cases met the larping criteria fully, strengthening Harviainen's (2011) original observation about this trend in educational larps. The cases might be called edu-larps, but the majority of them do not promote larping in the strict definition we used. This also means that despite the label, brand appeal, and strong identity of larps, when analyzed in design terms, our cases do not look fundamentally different from other leadership development interventions that contain some form of role-playing. This raises the question of whether the term "edu-larp" means anything in terms of specific

design and methodology compared to educational role-playing, other than signaling a designer's background? This points to the need of a more defined differentiation between those concepts.

5.1.13 Larping and learning

The previous topic also brings up another issue, the added value of larping compared to other forms of role-playing, both in LD and in general education. Considering the third criterion, the "physical presence of at least some of the players as their" roles (Harviainen 2011: 176) is strong in all cases. Recent theoretical studies have suggested that the levels of physical embodiment and cognitive engagement might lead to a higher degree of immersion (Kapitany et al. 2022), and possibly transformative experiences (Bowman and Hugaas 2019, 2021). However, physically embodied role-playing is true to nearly all types of mentioned role-playing LDIs; thus this criterion can only delineate tabletop and computer RPGs, not other types.

On the other hand, our cases raise the question of whether the other criteria, the depth of the role and the integrity of the fiction have a significant beneficial effect on learning, or are these just the cornerstones of the autotelic leisure activity of larping? Further empirical research must show evidence on how and in what ways larping supports education and development, otherwise outsiders might jump to the conclusion that larping is relatively ineffective (or even detrimental) to learning compared to other role-playing methods.

5.2 Limitations

The notions of games, simulations, and role-playing are still hazy and often used as synonyms, even among academics (Crookall and Saunders 1989; Feinstein et al. 2002; Hallinger and Wang 2020). The recent appearance of RPG and larp studies in international research further complicates this situation. Limiting our case study to activities that define themselves as educational larps about leadership might seem artificial, as there are many leisure larps about leadership and also, many leadership development interventions that contain some kind of role-playing. To repeat our research question, we wanted to explore how leadership development larps attempt to develop leadership through their design.

Unfortunately, we found no analytic way to delineate larps from other forms of role-playing better than self-titling. One candidate, the notion of larping (Harviainen 2011) can be characterized as a "behavioral-psychological mode of engagement" (Deterding 2016, 104) that can happen in non-larp game framings as well (Harviainen 2011, 185). We found this phenomenon to be challenging to directly observe as the difference between a social role and a fully-fledged personality is highly subjective and in reality, moves on a spectrum. The criterion of (not) breaking the fiction is subjective as well, as sometimes breaking the fiction happens unobtrusively or deliberately, as part of the larp. Including these as criteria is more useful for studies that research player behavior and experience instead of game design.

Also, there are various drawbacks to using multiple case studies. First, the generalizability of the findings may be limited because of the small sample size, making it difficult to make broad inferences. We attempted to minimize case selection bias that may impair the representativeness of the chosen cases with transparent selection criteria, and counterbalance subjective interpretation and potential researcher bias during data analysis with co-author cross-analysis, but blindspots might still undermine the study's objectivity and trustworthiness. Our multiple-case study relied mainly on qualitative data, which can be interpreted and may lack the statistical rigor associated with quantitative research. Moreover, the absence of control over external factors makes establishing causal linkages hypothetical. Overall, we feel that our multiple-case study provided useful insights about designing

and applying larps for leadership development, but the limitations listed should be taken into account when evaluating our conclusions and contributions.

5.3 Recommendations and further directions

As our article analyzed its subject from a design perspective, future designers can benefit from its findings, whether they are designing a larp or some other leadership development intervention with role-playing in it. From our analysis, we gathered the following recommendations for the design of larps for leadership development:

Goals: Larps can be used for a wide variety of goals: organizational gain (*7Samurai*), personal development (*Groundhog*, *MoveOn*), and team development (SPGR). Based on the analyzed cases, we hypothesize that it could be beneficial to have a contradiction between different layers of the design (e.g., cooperating as players to play competing characters) as it builds creative tension (see Harviainen et al. 2014). Designers and empirical research should explore this space.

» **Gameplay framing:** The most influential dimensions to the player agency could be: the duration of the larp and framing. To enhance the experience of agency, we recommend mixing longer duration with less rigid framing (*MoveOn*) or utilizing repetition (SPGR, *Groundhog*).

» **"Larping:"** Character roles were not always needed to reach the aim of the larp (*Groundhog*, *7Samurai*) and usually, breaking the fiction to include more reflection was seen as good design (*MoveOn*, *Groundhog*, *7Samurai*). Suggested specific action lists (SPGR) or behavioral spectrums (*Groundhog*) create affordances to develop for players.

» **Setting & props:** Real-life settings were generally used to make the larps recognizable and accessible to players. One of the advantages of real-life organizational settings is that they support soft scene framing with diegetic schedules and meetings (*MoveOn*).

» **Replayability:** Tailoring to participants (*MoveOn*) inhibits replayability and should only be done if enough resources are available for this. Otherwise, high replayability might be beneficial, especially to enhance mastery learning and transference to real-world situations.

» **Thin game layer**: Larps do not need a heavy game layer with a lot of mechanics. This might be of added value compared to other forms of (serious) games that are used in learning contexts, as it makes the design more accessible to people who are less motivated by game elements (such as points or winning).

» **Urgency:** Crisis (SPGR, *7Samurai*), turbulent VUCA environments, radical uncertainty (*MoveOn*), or just high stakes (*Groundhog*) create urgency, drive the larp forward, and heighten the tension in larps, drawing the players out of their comfort zone. This makes for more intense learning situations. The explorative and rehearsing aspects of role-playing can also prepare participants to face these challenges more effectively in real life.

» **Low hierarchy:** Having a low (*Groundhog*) or zero (*7Samurai*) hierarchy between player characters means that players will have a more equal chance to practice leadership skills. This way leadership can emerge through organic play. Developing through a pure follower role in leadership competencies is a complicated issue that needs further research.

» **Experiential learning cycle:** We recommend going through all stages of the learning circle when using larp for leadership development.

» **Leadership style:** Based on the cases, the larp medium seems to be particularly suited to teach versatility in behavioral styles. In return, a flexible and versatile leadership behavior repertoire is especially beneficial in turbulent, VUCA environments.

»   **Observer roles:** We recommend observing the larp, either by the game master (*MoveOn*), designated observers (*7Samurai*, SPGR), or participants who (temporarily) fill the observer role (*Groundhog*). This adds to the learning of both the participants being observed and the observers themselves.

Our recommendations for future research are:

»   **Overall:** Further study could also evaluate if new sliders from the current work should be added to the Mixing Desk of Edu-Larp (Bowman 2018). The Mixing Desk of Edu-Larp is a design frame that uses metaphor of a mixing desk to show different design choices that can be made for edu-larp, presented in dichotomies, such as, transparant vs secret for the element "openness."

»   **Cross-reference:** Systematic comparisons with role-playing interventions that do not label themselves as larp might lead to more crystallized phenomenons (Richardson 2000), and a clearer understanding of which role-playing tradition offers what advantages over the others in which aspect

»   **Terminology:** Harviainen's (2011) definition of larping refers to a complex yet specific type of embodied role-playing behavior that is common both during larps and non-larp events. We suggest that *etic* umbrella terms (Harris 1976) should be as neutral and analytic as possible to minimize linguistic one-sidedness and gain a more widespread acceptance in academia. Thus, we suggest using a different term, especially when investigating this phenomenon in non-larp contexts.

»   **Role vs. character:** We need more empirical data about the mediating effect of role-depth plays in development. In other words, whether playing a fully-fledged character instead of a social role has a significant impact on learning, and in what sense?

»   **Integrity of fiction:** We also need more empirical data on how continuous role-play, unbroken fiction, and immersion might mediate learning and development. In other words, what are the benefits of playing something uninterrupted, without dual cognition as opposed to other methods that purposefully break the fiction for reflection or calibration?

6. CONCLUSION

Many leadership development (LD) interventions contain some form of role-playing and a lot of leisure live-action role-playing games or larps deal with leadership topics explicitly or implicitly. However, there are not many leadership development edu-larps, meaning larps that were designed to be educational in their gameplay from the get-go and were utilized as formal or non-formal leadership development interventions.

This study successfully identified four such cases, and in a multiple case study that combined several typologies of both the leadership development research field and the field of edu-larp, applied drama, and simulation to form a comparative framework, examined how these leadership development larps attempt to develop leadership through their design.

Results found that while robust empirical results are still the weakness of role-playing game studies, the cases showed remarkable diversity in terms of conceptual leadership development frameworks, goal structures, the framing of gameplay, and the depth of character design. Common things among the cases were the usage of real-life settings without props, thin game layers, high replayability or variability, utilization of urgency, and failure to meet all criteria of larping (Harviainen 2011). All cases shared the ideal of the versatile leader, relatively low hierarchy, the structural support for experiential learning, and observer roles.

The limitations of this research focused on the small number of cases and a discussion on "what is larp(ing). " Recommendations were made towards future designers making their larps for leadership

development and for future research, to look at terminology, other types of interventions, and more empirical data for the mediating effect of role-depth and fiction integrity.

REFERENCES

Agboola Sogunro, Olusegun. 2004. "Efficacy of Role-playing Pedagogy in Training Leaders: Some Reflections." *Journal of Management Development* 23, no. 4: 355–371.

Antonakis, John. and David Day. 2017. *The Nature of Leadership.* Thousand Oaks: SAGE.

Arjoranta, Jonne. 2011. "Defining Role-Playing Games as Language-Games." *International Journal of Role-playing* 1: 3–17.

Avolio, Bruce J., David A. Waldman, and Walter O. Einstein. 1988. "Transformational Leadership in a Management Game Simulation: Impacting the Bottom Line." *Group & Organization Studies* 13, no. 1: 59–80.

Bailey, Jennifer, Forrest Kaiser, Christopher Thomas, Scott Dillingham, Daniel Norwood, Nikia Smith, and Arthur Brown. 2022. "The Intersection of Preparation and Practice: School Leadership Learning through Simulation." *NASSP Bulletin* 106, No. 3: 209–231. DOI: 10.1177/01926365221117487

Baker, David Vincent. 2005. "How RPG Rules Work." Anyway, January 18.

———. 2013. "The Object of the Game vs Your Character's Goals." Anyway, August 30.

———. 2020. "Powered by the Apocalypse, Part 1. Using Apocalypse World to Outline and Draft Your Own RPG." Lumpley Games, March 14.

Balzac, Stephen R. 2016. "An Exploration into How Live-action Role-playing Game (LARP) Participants Experience Leadership, Decision Making, and Working within a Group in Non-game Situations." PhD diss., Capella University.

Bass, Bernard M. 1990. *Bass and Stogdill's Handbook of Leadership: Theory, Research, and Managerial Applications*. New York: The Free Press.

———. 1985. *Leadership and Performance Beyond Expectations.* New York: Free Press.

Belbin, R. Meredith. 2012. *Team Roles at Work.* London: Routledge.

Bolton, Gavin M., and Dorothy Heathcote. 1999. S*o You Want to Use Role Play? A New Approach in How to Plan.* Trentham: Institute of Education Press.

Bowman, Sarah Lynne. 2010. *The Functions of Role-playing Games: How Participants Create Community, Solve Problems, and Explore Identity.* Jefferson: McFarland & Company.

———. 2014. "Educational Live Action Role-playing Games: A Secondary Literature Review." In *Wyrd Con Companion Book 2014,* edited by Sarah Lynne Bowman, 112-131. Los Angeles, CA: Wyrd Con.

———. 2018. "The Mixing Desk of Edu-Larp." *Workshop for Edu-Larp Conference 2018, Malmö, Sweden*, May 14, 2018.

———. 2024. "Immersion and Shared Imagination in Role-Playing Games". In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Bowman, Sarah Lynne, and Anne Standiford. 2015. "Educational Larp in the Middle School Classroom-A Mixed Method Case Study." *International Journal of Role-Playing* 5: 4–25.

———. 2016. "Enhancing Healthcare Simulations and Beyond: Immersion Theory and Practice." *International Journal of Role-Playing* 6: 4–19.

Bowman, Sarah Lynne, and Kjell Hedgard Hugaas. 2019. "Transformative Role-play: Design, Implementation, and Integration." Nordiclarp.org, December 10.

———. 2021. "Magic is Real: How Role-playing Can Transform Our Identities, Our Communities, and Our Lives." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde, 52-74. Oslo, Norway: Knutepunkt.

Blake, Robert R., and Jane S. Mouton. 1964. *The Managerial Grid.* Houston: Gulf Publishing Co.

Branc, Blaž. 2018. *Imagine This*. Copenhagen: Rollespilsakademiet.

Brown, Michael E., Linda K. Treviño, and David A. Harrison. 2005. "Ethical Leadership: A Social Learning Perspective for Construct Development and Testing." *Organizational Behavior and Human Decision Processes* 97, no. 2: 117–134.

Burns, James MacGregor. 1978. *Leadership.* New York: Harper & Row.

Buzady, Zoltan. 2017. "Flow, Leadership and Serious Games – A Pedagogical Perspective." *World Journal of Science, Technology and Sustainable Development* 14, no. 2/3: 204–217.

Calleja, Gordon. 2011. *In-Game: From Immersion to Incorporation*. Cambridge: MIT Press.

Carlyle, Thomas. 1993. *On Heroes, Hero-worship, & the Heroic in History.* Berkeley: University of California Press.

Cebulski, Adam R. 2017. "Utilizing Gamification to Foster Leadership Competency Development." *A Competency-Based Approach for Student Leadership Development: New Directions for Student Leadership* 156: 73–86.

Cohen, William A. 2009. *Drucker on Leadership: New Lessons from the Father of Modern Management.* New York: John Wiley & Sons.

Creswell, John W., and Cheryl N. Poth. 2007. *Qualitative Inquiry and Research Method: Choosing Among Five Approaches.* Thousand Oaks: Sage.

Crookall, David, and Danny Saunders. 1989. "Towards an integration of communication and simulation". In *Communication and Simulation: From Two Fields to One Theme*, edited by David Crookall and Danny Saunders, 3–29. Philadelphia: Multilingual Matters.

Coates, Joseph F. 2000. "Scenario Planning." *Technological Forecasting and Social Change* 65, no. 1: 115–123.

Creswell, John W., and Dana L. Miller. 2000. "Determining Validity in Qualitative Inquiry." *Theory Into Practice* 39, no. 3: 124–130.

Cullinan, Maryanne, and Jennifer Genova. 2023. "Gaming the Systems: A Component Analysis Framework for the Classroom Use of RPGs." *International Journal of Role-playing* 13: 7–17.

Day, David V. 2000. "Leadership Development: A Review in Context." *The Leadership Quarterly* 11, no. 4: 581-613. https://doi.org/10.1016/S1048-9843(00)00061-8.

Day, David V., John W. Fleenor, Leanne E. Atwater, Rachel E. Sturm, and Rob A. McKee. 2014. "Advances in Leader and Leadership Development: A Review of 25 Years of Research and Theory." *Leadership Quarterly* 25: 63–82.

Der Sahakian, Guillaume, et al. 2015. "Setting Conditions for Productive Debriefing." *Simulation & Gaming* 46, no. 2: 197–208.

Deterding, Christoph Sebastian. 2016. "Make-Believe in Gameful and Playful Design." In *Digital Make-Believe*, edited by Phil Turner and J. Tuomas Harviainen, 101–124. Basel: Springer.

Dooley, Larry M. 2002. "Case Study Research and Theory Building." *Advances in Developing Human Resources* 4, no. 3: 335-354.

Ey, Pamela E., Gregory C. Berka, and Lynda Doyle. 2021. "Adaptive Critical Thinking for a VUCA World." *Organization Development Review* 53, no. 2: 44-50.

Feinstein, Andrew Hale, Stuart Mann, and David L. Corsun. 2002. "Charting the Experiential Territory: Clarifying Definitions and Uses of Computer Simulation, Games, and Role Play." *Journal of Management Development* 21, no. 10: 732–744. DOI: 10.1108/02621710210448011

Fiedler, Fred E. 1974. "The Contingency Model. New Directions for Leadership Utilization." *Journal of Contemporary Business* 3, no. 4: 65–80.

Fine, Gary Alan. 1983. *Shared Fantasy. Role-Playing Games as Social Worlds*. Chicago: University of Chicago Press

Fischer, Olivia, Chris Hartford, Joanna Piancastelli, and Maria Shulga. 2020. "Playing a Leader." In *What Do We Do When We Play?*, edited by Eleanor Saitta, Johanna Koljonen, Jukka Särkijärvi, Anne Serup Grove, Pauliina Männistö, and Mia Makkonen, 84–88. Helsinki: Solmukohta.

Funk, Samantha. 2021. "Examining The Implications Of Tabletop Roleplaying Games For Use In Leadership Development Use In Leadership Development: An Integrative Review." MA Thesis, University of Southern Maine.

Gagnon, Suzanne, Heather C. Vough, and Robert Nickerson. 2012. "Learning to Lead, Unscripted: Developing Affiliative Leadership through Improvisational Theatre." *Human Resource Development Review* 11, no. 3: 299–325.

Galgóczi, Katalin, et al. 2021. *Sociodrama. The Art and Science of Social Change.* Budapest: L'Harmattan.

Gall, Meredith Damien, Walter R. Borg, and Joyce P. Gall. 1996. *Educational Research: An Introduction.* White Plains: Longman Publishing.

Gibson, James J. 1977. *The Theory of Affordances.* Hilldale: Erlbaum Associates.

Graen, George B., and Mary Uhl-Bien. 1995. "Relationship-based Approach to Leadership: Development of Leader-Member Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-level Multi-domain Perspective." *The Leadership Quarterly* 6, no. 2: 219–247

Greenleaf, Robert K. 1970. *The Servant as Leader.* Indianapolis: The Greenleaf Center for Servant Leadership.

Guenthner, Joseph F., and Lori L. Moore. 2005. "Role Playing as a Leadership Development Tool," *Journal of Leadership Education* 4, no. 2: 59–65.

Guest, Greg, Emily E. Namey, and Marilyn L. Mitchell. 2013. *Collecting Qualitative Data: A Field Manual for Applied Research.* Thousand Oaks: Sage.

Hallander, Ingrid. 2003. "Life Cycle Value in Product Development: A Case Study in the Transportation Industry." *Proceedings of the International Conference on Engineering Design, ICEDVolume DS 31.*

Hallinger, Philip, and Ray Wang. 2020. "The Evolution of Simulation-Based Learning Across the Disciplines, 1965–2018: A Science Map of the Literature." *Simulation & Gaming* 51, no. 1: 9–32. DOI: 10.1177/1046878119888246

Hammer, Jessica, Whitney Beltrán, Jonathan Walton, and Moyra Turkington. 2024. "Power and Control in Role-playing Games." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Harris, Marvin. 1976. "History and Significance of the Emic/etic Distinction." *Annual Review of Anthropology* 5, no. 1: 329–350. DOI: 10.1146/annurev.an.05.100176.001553

Hart, Paul 't, and R. Arjen Boin. 2001. "Between Crisis and Normalcy: The Long shadow of Post-crisis Politics." In *Managing Crises: Threats, Dilemmas, Opportunities*, edited by Uriel Rosenthal, R. Arjen Boin and Louise K. Comfort, 28–46. Springfield, Charles C. Thomas Publisher.

Harviainen, J. Tuomas. 2011. "The Larping that is Not Larp." In *Think Larp: Academic Writings from KP2011*, edited by Thomas Duus Henriksen. Christian Bierlich, Kasper Friis Hansen, and Valdemar Kølle, 172–193. Rollespilsakademiet, Copenhagen.

Harviainen, J. Tuomas, Timo Lainema, and Eeli Saarinen. 2012. "Player-reported Impediments to Game-Based Learning." In *Proceedings of DiGRA Nordic 2012 Conference: Local and Global – Games in Culture and Society*: 1–14.

Harviainen, J. Tuomas. 2013. "Managerial Styles in Larps: Control Systems, Cultures, and Charisma." In *The Wyrd Con Companion Book 2013*, edited by Sarah Lynne Bowman and Aaron Vanek, 112–124. Los Angeles: Wyrd Con.

Harviainen, J. Tuomas, Rafael Bienia, Sarah Lynne Bowman, Simon Brind, Michael Hitchens, Yaraslau I. Kot, Esther MacCallum-Stewart, David W. Simkins, Jaakko Stenros, and Ian Sturrock. 2024. "Live Action Role-playing Games." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Heifetz, Ronald A. Marty Linsky, and Alexander Grashow. 2014. *Adaptive Leadership.* Boston: Harvard Business Review Press.

Hersey, Paul, and Ken H. Blanchard. 1977. *Management of Organizational Behavior 3rd Edition – Utilizing Human Resources*. New Jersey: Prentice Hall.

Hertz, Michael. 2006. *Adaptive Role-Play Exercises for a Leader Development Center*. Progeny Systems Corporation.

Hirsch, Christina, Charlotte von Bülow, and Peter Simpson. 2023. "Stoicism, Philosophy as a Way of Life, and Negative Capability: Developing a Capacity for Working in Radical Uncertainty." *Leadership*, Online First. DOI: 10.1177/17427150231178092

Hjalmarsson, Sara. 2011. "Live-Action Role-Play as a Scenario-Based Training Tool for Security and Emergency Services." *10th European Conference on Information Warfare and Security 2011, ECIW 2011*.

Hollenbeck, George P., Morgan W. McCall, and Robert F. Silzer. 2006. "Leadership Competency Models." *The Leadership Quarterly* 17, no. 4: 398–413.

Hugaas, Kjell Hedgard. 2022. "Bleed and Identity: A Conceptual Model of Bleed and How Bleed-out from Role-playing Games Can Affect a Player's Sense of Self." *International Journal of Role-Playing 15*.

Hyltoft, Malik. 2010. "Four Reasons Why Edu-larp Works." In *LARP – Einblicke – Aufsatzsammlung zum MittelPunkt 2010*, edited by Karsten Dombrowski, 43–57. Braunschweig: Zauberfeder.

Kapitany, Rohan, Tomas Hampejs, and Thalia R.Goldstein. 2022. "Pretensive Shared Reality: From Childhood Pretense to Adult Imaginative Play." *Frontiers in Psychology* 13. https://doi.org/10.3389/fpsyg.2022.774085

Kauffman, Stuart. A. 2000. *Investigations.* Oxford: Oxford University Press.

Klenke, Karin. 2008. *Qualitative Research in the Study of Leadership.* Bringley: Emerald Group Publishing.

Kolb, David A. 2015. *Experiential Learning: Experience as the Source of Learning and Development.* Upper Saddle River: Pearson Education.

Kolseth Jensen, Maria. 2020. "Larp in Leadership Development." BA thesis, The Royal Norwegian Naval Academy.

———. 2021. "Larp in Leadership Development." In *Book of Magic: Vibrant Fragments of Larp Practices*, edited by Kari Kvittingen Djukastein, Marcus Irgens, Nadja Lipsyc, and Lars Kristian Løveng Sunde. Oslo: Knutepunkt.

Koontz, Harold, and Cyril O'Donnell. 2004. *Principles of Management: An Analysis of Managerial Functions.* London: Pickering & Chatto.

Kot, Yaraslau I. 2012. "Educational Larp - Topics for Consideration." In *The Wyrd Con Companion Book*, edited by Aaron Vanek and Sarah Lynne Bowman, 118–27. Los Angeles, CA: Wyrd Con.

La Belle, Thomas J. 1982. "Formal, Non-formal and Informal Education: A Holistic Perspective on Lifelong Learning." *International Review of Education* 28: 159–175.

Lasley, Joe. 2020. "An Examination of Gaming Environments in Dungeons and Dragons Groups." PhD diss., University of San Diego. DOI: 10.22371/07.2020.033

———. 2022. "Role-playing Games in Leadership Learning." In *New Directions for Student Leadership 174: Games in Leadership Learning*, edited by John D. Egan and John N. Banter, 73–87. DOI: 10.1002/yd.20501

Lawrence, Kirk. 2013. "Developing leaders in a VUCA environment." *UNC Executive Development*, 1–15.

LeClaire, Matthew M. 2020. "Live Action Role-playing: Transcending the Magic Circle." *International Journal of Role-Playing* 10: 56–69.

Lee, Graham. 2003. *Leadership Coaching: From Personal Insight to Organisational Performance.* London: Chartered Institute of Personnel and Development.

Lerman, Liz, and John Borstel. 2003. *Critical Response Process.* Takoma Park: Dance Exchange.

Lewin, Kurt, Ronald Lippitt and Ralph White. 1939. "Patterns of Aggressive Behavior in Experimentally Created Social Climates." *The Journal of Social Psychology*: 271–301.

Lippitt, Ronald. 1943. "The Psychodrama in Leadership Training." *Sociometry* 6, no. 3: 286–292. DOI: https://doi.org/10.2307/2785182

Lipscomb, Martin. 2012. "Abductive Reasoning and Qualitative Research." *Nursing Philosophy* 13, no. 4: 244–256.

Mackay, Christina N. 2022. "Perceptions of Skill Transference from Dungeons & Dragons to Personal, Social, and Work." Diss*.,* The University of Arizona.

McLennan, Deanna, and Kara Smith. 2006. "Promoting Positive Behaviours Using Sociodrama." *Journal of Teaching and Learning* 4, no. 2: 347–55

Mercer, Ian S., John N. Harris, and R. Gabrielle Swab. 2021. "To the Top: A Role Playing Exercise Highlighting Leadership, Influence Tactics, Decision Making, Conflict Resolution and Communication." *Journal of Organizational Behavior Education* 14: 71–94.

Merseth, Katherine K. 1994. "Cases, Case Methods, and the Professional Development of Educators." *ERIC Document Reproduction Service.*

Montola, Markus. 2008. "The Invisible Rules of Role-Playing. The Social Framework of Role-Playing Process." *International Journal of Role-Playing* 1: 22–36.

Moreno, Jacob Levy, "Role Theory and the Emergence of the Self." *Group Psychotherapy 15*, 1962 114–117.

Neelands, Jonothan, and Tony Goode. 2015. *Structuring Drama Work*. Cambridge: Cambridge University Press.

Ofman, Daniel. 2001. *Core Qualities: A Gateway to Human Resources*. Schiedam: Scriptum Management.

Owens, Bradley P., and David R. Hekman. 2012. "Modeling How to Grow: An Inductive Examination of Humble Leader Behaviors, Contingencies, and Outcomes." *Academy of Management Journal* 55: 787–818.

O'Neill, Cecily. 1995. *Drama Worlds: A Framework for Process Drama*. Portsmouth: Heinemann Drama.

Pauwels, Pieter and Paul Mattyssens. 2004. "The Architecture of Multiple Case Studies in International Business." In *Handbook for Qualitative Research Methods for International Business*, edited by Rebecca Marshan-Piekkari and Catherine Welch, 125–143. Cheltenham: Edward Elgar.

Praszkier, Ryszard. 2017. *Empowering Leadership of Tomorrow*. Cambridge: Cambridge University Press.

Reininghaus, Gerrit. 2021. "Three Forms of LAOGs." Alles Ist Zahl, May 7.

Richardson, Laurel. 2000. "Writing: A Method of Inquiry." In *Handbook of Qualitative Research*, edited by Norman K. Denzin, Yvonna S. Lincoln, 923–948. 2nd Ed. Thousand Oaks: Sage.

Rönnåsen, Moa. 2022. "Leading with Larp Magic." In *Distance of Touch: The Knutpunkt 2022 Magazine*, edited by Juhana Pettersson, 100–104. Helsinki: Pohjoismaisen roolipelaamisen seura.

Rudas, János. 2007. *Delphi örökösei* [Heirs of Delphi]. Budapest: Lélekben othton.

Samul, Joanna. 2020. "The Research Topics of Leadership: Bibliometric Analysis from 1923 to 2019." *International Journal of Educational Leadership and Management* 8, no. 2: 119–143. DOI: 10.17583/ijelm.2020.503

Sjøvold, Endre. 2007. "Systematizing Person-Group Relations (SPGR) A Field Theory of Social Interaction." *Small Group Research* 38, no. 5: 615–635. DOI: 10.1177/1046496407304334

Snowden, Dave, and Alessandro Rancati. 2021. *Managing Complexity (and Chaos) in Times of Crisis. A Field Guide for Decision Makers Inspired by the Cynefin Framework.* Luxembourg: Publications Office of the European Union.

Stogdill, Ralph M. 1948. "Personal Factors Associated with Leadership: A Survey of the Literature." *The Journal of Psychology* 26: 35–71. DOI: 10.1080/00223980.1948.9917362.

Sweller, John. 2020. "Cognitive Load Theory and Educational Technology." *Educational Technology Research and Development* 68, no. 1: 1–16. https://doi.org/10.1007/s11423- 019-09701-3

Túri, Bálint Márk, and Mátyás Hartyándi. 2023. "Playing With The Fictitious "I". Early Forms of Educational Role-Playing in Hungary, 1938-1978." *International Journal of Role-Playing* 14: 47-60.

Vejdemo, Susanne. 2018. "Play to Lift, not Just to Lose." In *Shuffling the Deck, The Knutpunkt 2018 Color Printed Companion*, edited by Annika Waern and Johannes Axner, 143-146: ETC Press.

Vijayakumar, Pooja B., Michael J. Morley, Noreen Heraty, Mark E. Mendenhall, Joyce S. Osland. 2018. "Leadership in the Global Context: Bibliometric and Thematic Patterns of an Evolving Field." *Advances in Global Leadership*: 31–72. 10.1108/S1535-120320180000011002

Visscher, Klaasjan. 2023. "Experiencing Complex Stakeholder Dynamics Around Emerging Technologies: A Role-play Simulation." *European Journal of Engineering Education*, DOI: 10.1080/03043797.2023.2196940

Vroom, Victor H., and Phillip W. Yetton. 1973. *Leadership and Decision-Making.* Pittsburgh: University of Pittsburgh Press.

Vogel, Bernd, Becky Reichard, Sasa Batistič, and Matej Černe. 2021. "A Bibliometric Review of the Leadership Development Field: Wow We Got Here, Where We Are, and Where We Are Headed." *The Leadership Quarterly* 32, no. 5: 101381. DOI: https://doi.org/10.1016/j.leaqua.2020.101381

Westborg, Josefin. 2023. "The Educational Role-Playing Game Design Matrix: Mapping Design Components onto Types of Education." *International Journal of Role-playing* 13: 18–30.

Yazan, Bedrettin. 2015. "Three Approaches to Case Study Methods in Education: Yin, Merriam, and Stake." *The Qualitative Report* 20, no. 2: 134–152.

Yin, Robert. 1994. *Case Study Research: Design and Methods.* Beverly Hills: Sage.

———. 2003. *Case Study Research.* Beverly Hills: Sage.

Yukl, Gary. 2010. *Leadership in Organizations*. New Jersey: Pearson

Zagal, José P., and Sebastian Deterding, eds. 2024. In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

APPENDIX 1: Leisure larps from the last decade that deal with leadership topics

Year	Title	Organizer / *Publisher* / (Authors)
2013	*The Climb*	*Bully Pulpit Games*
2013	*Witchwood Larp*	Red Feather Roleplaying
2014	*Anything for N*	Turbolarp
2015	*Legion: Siberian Story*	Rolling
2018	*Cult*	Obscurus
2018	*Suffragette!*	(Susanne Vejdemo, Siri Sandqvist, and Rosalind Göthberg)
2018	*Wing And A Praye*r	Allied Games
2019	*Perfection*	*Bully Pulpit Games*
2021	*Lord of Lies*	Atropos Studios
2022	*A Meeting of Monarchs*	Charmed Plume Productions
2022	*Three Kingdoms*	(Jake Cyriax)
2023	*The Seekers*	(Juno Herman Langland)

Source: by authors

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Gijs van Bilsen is a public speaker on using your imagination to learn. He is a Serious Larp designer, and an organizational development expert. Together with his partner, Anne van Barlingen, they design creative learning interventions with their company Live Action Learning (www.liveactionlearning.com). Gijs has done research into the use of simulation, serious games and larp for leadership development. He also teaches at and designs experience-based curriculum for several universities.

Learning from Ludemes: An Inventory of Common Player Actions within Tabletop Role-Playing Games (TTRPGs) to Inform Principled Design of Game-Based Learning Experiences

Abstract: In this study, the authors investigate role-playing game design through the lens of instructional design practice to probe the ecosystem of tabletop role-playing games (TTRPGs) and their applied use for learning. A qualitative thematic analysis approach is used to systematically catalog and categorize all possible player actions, called ludemes, from the 5th Edition of Dungeons & Dragons (*D&D*). Through this analysis, the interplay of game mechanics, player actions, and rules of TTRPGs are explored, unveiling their potential to stimulate various psychological, environmental, and behavioral factors that positively influence learning processes. Specifically, this study's analysis of a game's ludemes (i.e., player actions) exposes the interrelationships, congruence, and combinations of actions with various learning processes. The identified categories of ludemes in the study pave the way toward a working vocabulary and framework for future research in the application of game-based learning and its potential to catalyze meaningful learning outcomes. From a global instructional standpoint, this study highlights the role of pedagogical affordances, such as collaborative storytelling and problem solving skills, theorizing how TTRPGs can promote cognitive, metacognitive, affective, social, and cultural learning. Toward these goals, the authors posit that role-playing, with its complex dynamics and compelling narratives, offers a robust and natural conduit for learning.

Keywords: ludemes, *Dungeons & Dragons*, tabletop role-playing games, learning, education, pedagogy

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1. INTRODUCTION

While active learning strategies have repeatedly outperformed more traditional strategies, such as rote memorization, effective incorporation into formal education remains challenging for educators (Hake 1998; Prince 2004; Freeman et al. 2014). One promising strategy for driving active learning into formal learning environments is game-based learning (GBL; Plass, Mayer, and Homer 2020), particularly within the context of tabletop role-playing games (TTRPGs). The term "role-playing game" (RPG), in general, encompasses game types that are characterized by players portraying and developing characters in an imagined setting, governed by sets of rules (Arenas, Viduani, and Araujo 2022). TTRPGs are a type of RPG that can be thought of more specifically as collaborative participatory narratives in which players adopt the personas of characters within imagined settings and are guided by a game master (GM) who orchestrates the narrative and facilitates the game mechanics (Bowman 2010; Abbott, Stauss, and Burnett 2022).

Although the generative narrative among players in a TTRPG can be supported by summary sheets, books, and digital tools, the game itself is not automatically narrated or scripted. Instead, it is crafted by the players only during the act of playing together. The dynamic and emergent experiences offered by TTRPGs promote learner engagement and facilitate collaborative learning (Barron 2003; Zagal et al. 2006; Anderson and Dron 2011; Bowman 2010; Nicholson 2015). In TTRPGs, the game's continuity is driven by both the players and the GM, with the GM taking on the major role of facilitating or "holding together" the game world and narrative and serving as referee to the players in order to maintain narrative cohesion. Drawing from the principles of experiential learning, education researchers increasingly understand that a person's actions, including tasks and engagements within an RPG experience, are pivotal drivers of their learning process (Wenger 1999).

The learning potential of role-playing games may be just as powerful as their entertainment value due to their immersive, interactive, and inherently social nature. They provide a unique setting where players can engage in simulation, which is a critical aspect of experiential learning. Experiential learning theory, as proposed by David Kolb (1984), suggests that knowledge construction occurs through a four-stage cycle that includes concrete experiences, reflective observation, abstract conceptualization, and active experimentation (Kolb 1984). Immersive simulations, such as those found in RPGs, provide opportunities for all stages of this learning cycle. Further, research indicates that immersive simulations can enhance motivation, engagement, and deep learning (Dede 2009). This is because they provide authentic, complex problem-solving scenarios that closely mirror real-world contexts, thereby increasing the relevance and applicability of the learning.

The simulated game world in RPGs often functions as a "safe space" where players can experiment with different identities, strategies, and scenarios without the fear of real-world consequences (Gee 2003). This feature allows for experimentation within worlds and rehearsal of complex situations, providing a high level of authenticity and situated cognition (Brown, Collins, and Duguid 1989). According to situated cognition theories, learning happens most effectively when it is associated with social and physical contexts that reflect how that knowledge will be used in real-life situations (Lave and Wenger 1991). While some aspects of the fantasy worlds of RPGs are outside the realm of reality, there are a number of elements that can mimic real-world systems, such as economics, politics, or ecology.

Problem-solving scenarios native to RPGs often involve decision-making tasks that allow advanced players to model expert processes. Some examples might include players who need to strategize like a military commander, negotiate like a diplomat, or solve puzzles like a detective. This kind of expert-level modeling can potentially facilitate the transfer of learning to new contexts (Bransford, Brown, and Cocking 2000), and may allow more novice players to learn through observation. RPG worlds and characters can reflect diverse cultures and social systems, which provides opportunities for players to gain empathy and understanding of different perspectives (Nicholson 2015). Moreover, players typically work together to overcome challenges, fostering valuable social skills that may also be transferred to real-world contexts (Steinkuehler 2006).

However, despite the increasingly evident potential of role-playing games and their continuous evolution through creative innovations by both mainstream and indie developers, a significant gap exists in understanding the design principles that contribute to the mechanisms behind effective learning through role-playing. Game designers with an eye toward learning are tasked with creating engaging learning experiences by assembling a combination of activities within a game that stimulate beneficial learning processes and outcomes. Nevertheless, in the context of role-playing design, whether specifically geared towards learning or not, creators do not currently have a comprehensive inventory of player actions and the expected learning outcomes these actions could generate.

In this paper, we take an instructional design perspective toward formally analyzing tabletop role-playing games (TTRPGs) for what people *do* in role-playing games and how these actions translate into learning outcomes. To accomplish this goal, the authors present a method for formally identifying common player actions, or *ludemes*, in *Dungeons & Dragons 5th Edition*, an example case of TTRPGs in which players collaboratively develop narrative as a result of gameplay. As learning is inherently a participatory process that requires actions on the part of the learner, the identification and categorization of actions that players can take within the context of the game rules is an important tool for employing player actions in games that have the intended educational impact. Using a qualitative thematic approach to analyze the game's official rules, 37 unique categories of player actions called *ludemes* are categorized and aligned to the potential learning processes that can be activated as a result of players taking various actions within the game. In addition to the identification of a taxonomy of ludemes that are common to TTRPG play, another implication of this study includes the presentation of

design principles for TTRPG developers and educators toward maximizing learning opportunities via TTRPGs and larps, as role-playing is a robust, natural, and fun way to learn.

2. BACKGROUND

2.1 Real Learning by Playing Pretend: Applied Role-Playing Games for Learning

Role-playing games, whether tabletop, live-action, or computer-based, have been used across various industries, from medical fields such as nursing, surgery, and dentistry, to international relations and history education. The power of RPGs in promoting learning emerges from their immersive, player-driven nature and the multitude of learning affordances they offer.

RPGs have been regularly shown to stimulate cognitive processes such as strategic thinking, problem-solving, and decision-making (Gee 2003). Moreover, RPGs foster metacognitive growth by encouraging players to reflect on their and others' decision-making processes to enhance their gameplay (Zimmerman 2002). From an affective perspective, RPGs evoke a wide range of emotions, contributing to overall player engagement and motivation (Ryan et al. 2006), as well as a sense of agency and sense of belonging concerning the player's characters and investment into the game (Bowman and Schrier 2024). Adding to the affective affordances of RPGs is that they are inherently social, requiring collaboration, communication, and negotiation between players (Vasalou et al. 2008; Woods 2016). These social affordances can be examined by treating the game as a social network, where each player and their decisions are considered or analyzed based on their effect on the overall gameplay and player experience. On the social affordances spectrum, narrative components, which are critical elements in RPGs, allow players to feed their natural affinity for learning through stories and sequences of events involving interactions between characters (Bruner 1991; Schank 1990; Koster 2005). TTRPGs stand out among various game types in the way they offer unique opportunities to foster emergent narratives, and to simulate complex systems with remarkable detail. They also excel in the use of storytelling to model fascinating game worlds, and allow the collaborative shaping of events within a well-defined set of rules and player interactions. The fun and novelty in these experiences add to the engagement, bolstering the relationship between learning and games (Koster 2005).

Regarding pedagogical benefits, RPGs can be designed to target specific learning outcomes (Hammer et al. 2024). The relationship between player actions, game mechanics, and learning outcomes in a game can be formally studied and optimized to enhance the game's educational value (Klopfer et al. 2009). RPGs also offer culturally relevant pedagogical exploration opportunities, providing a platform for understanding diverse cultures, histories, and perspectives (Squire 2008). In addition to the pedagogical benefits derived from RPGs, there are powerful affordances for broader, global learning outcomes. These games offer a rich, dynamic environment that simulates real-world contexts and simplifies them, reducing complexity while maintaining relevance. This parallel between the game world and the real world provides a foundation for understanding and interacting with the complexities of reality in a safe, manageable environment. Inherent in RPGs, simulation is instrumental in modeling real-world phenomena, especially in the context of socially embedded phenomena and emotional responses (Aldritch 2005; Gee 2005; Barab et al. 2010).

Role-play, a fundamental aspect of RPGs, is a natural way for learners of all ages to make sense of their observations, integrate new information, and test out ideas in a safe, rule-defined environment (Garris et al. 2002; Thibodeau et al. 2016). These simulated real-world actions are key for both conventional educational paradigms and experiential learning designs, mirroring scenario-based, case-based, problem-based, and project-based learning. RPGs offer low-risk environments that are entertaining, engaging, and relevant, providing opportunities for both synchronous and asynchronous

play (Hammer et al. 2024). The strong simulation component of RPGs represents a wide range of potential character actions within the game world, setting the stage for a unique phenomenon of triple-layered interaction. This layered phenomenon involves a first layer of participating as a player that strategizes within the game and a second layer of acting as a character within the game world and staying within character. This is complemented further by a third layer, a meta-level of experiencing which goes beyond the primary table roles in the game. These immersive qualities embedded in RPGs are central to their transformative nature, suggesting deep learning potential (Fine 1983; Bowman 2010; Bowman and Schrier 2024).

In the world of RPGs, the distinction between player actions and character actions is vital. Character actions are bound only by players' imaginations within the scope of the game world and rules, and are effectively simulated actions performed by characters in a fantasy or fictional setting. Although they are representing fictional characters, players' in-game actions can also mirror the cognitive strategies, skills, and knowledge that can be used in the real world (Clark and Martinez-Garza 2012). With this in mind, it is important to recognize that the power of learning is derived from both realms. The ability of an RPG to simulate physical and social processes combined with the application of narrative to create engaging game worlds facilitates opportunities for co-constructing simulated, but effective sequences for developing understanding within a well-defined rule system (Gredler 1996). The game's rules system constrains the game, making it manageable while allowing for emergent gameplay that promotes active learning.

Despite the increasing popularity of RPGs and their recognized potential for learning, there is a gap in design principles targeting the optimization of these games for learning outcomes and processes for simulating real-world knowledge, skills, and cognitive tasks within games. This study addresses this gap by taking an instructional design perspective, analyzing players' actions in RPGs and their translation into learning outcomes. This approach aims to develop a comprehensive inventory of RPG mechanics and principles to enhance learning, providing a foundation for designing RPGs with learning outcomes in mind.

In conclusion, role-playing games, particularly TTRPGs, offer a unique and potent blend of learning affordances. The combination of narrative, simulation, social interaction, and active engagement in a rule-defined yet imaginative world offers unprecedented learning opportunities. Both a challenge and goal moving forward are to harness these affordances effectively, optimizing the design of RPGs to maximize their potential as powerful tools for learning.

2.2 Understanding Learning through Gameplay with the Social Cognitive Theory Lens

Social Cognitive Theory (Bandura 1986) is a psychological framework that seeks to explain human behavior, learning, and motivation as a complex set of factors that mutually influence each other. The theory incorporates elements from both constructivist and sociocultural perspectives on learning to predict changes in individual learning and behavior by considering the dynamic, reciprocal interaction between the person, environment, and behavior within a social context. This interaction is viewed as being both influenced by and simultaneously influencing individual learning and behavior.

SCT provides an excellent lens for considering the links between TTRPG gameplay and learning, as it explains the mutual influences of factors on changes to the individual within rich social settings. Depicted in Figure 1 is a modified version of Bandura's (1986) triadic reciprocal determinism model. In this model, a dynamic and reciprocal interaction exists between an individual's personal factors (cognition, affect, biology), their environment, and their behavior. These three factors continuously influence one another, shaping a person's learning and development. The model also reveals the level of complexity involved in designing and carrying out research to test the effectiveness of any learning experience, such as using TTRPGs as learning tools.

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Within a designed learning experience like a game, SCT highlights the importance of setting personal goals, engaging in self-regulation, and experiencing a high degree of agency over one's own learning to achieve desired outcomes. Self-regulation involves self-monitoring, self-evaluation, and self-reinforcement, allowing individuals to adjust their behavior and strategies to meet their goals. SCT also maintains that an individual's cognitive and affective processes play a critical role in determining behavior. These processes include knowledge, attention, memory, motivation, and emotional regulation, which interact with the environmental and behavioral factors to influence learning.

Directly paralleling the capabilities of TTRPGs, SCT emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others within social settings (including experts). This includes simulated social settings like TTRPGs and other simulation games. According to SCT, individuals can learn new behaviors and acquire new information by watching others (i.e., models) perform those behaviors. SCT also emphasizes the broader role of social and cultural factors in shaping individual behavior and learning. Social norms, cultural values, and expectations can impact an individual's cognitive processes, motivation, and self-efficacy as much or more than observational learning.

Figure 1. The Social Cognitive Theory (SCT) Framework
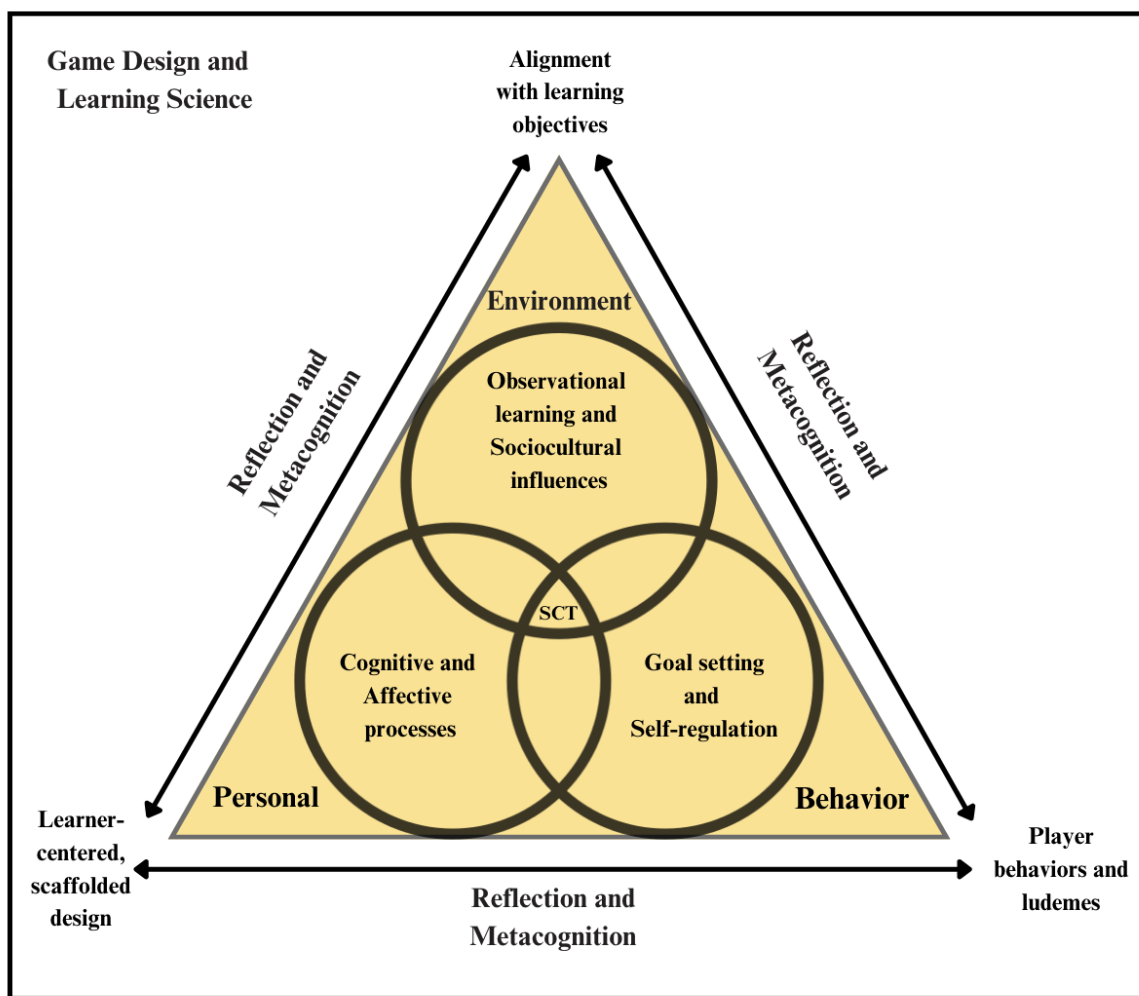
Within an SCT perspective, learning is any demonstrable change in behavior, knowledge, or affect. The operative mechanism for promoting learning is *activity* or *participation* by the individual within the learning experience (Wenger 1999). In other words, human learning can be facilitated by

doing something, in which the activity to be performed is influenced by someone's prior knowledge, affect, and the environment. Even if a learner is simply observing others or consuming media, these are still actions that they are performing within the learning setting. Specifically, learning requires continuous engagement in socially mediated experiences. This involves participating in activities, internalizing new information, and then applying this knowledge in subsequent actions. The key driver of learning is the act of *participation*: without some form of action from the learner, the learner does not encounter new information nor attempt a change in behavior. In other words, in any situation, learning does not just happen by itself, or information is not simply transferred. Instead, learners must have experiences in which they are active participants (Kolb 1984).

Also within this perspective, the outcome of learning is inextricably tied to active participation in the learning activity. This theoretical principle carries over to TTRPGs that are designed with learning goals in mind. In TTRPGs for learning, participation in the game is the primary mechanism at which learning happens: the game prompts a player to begin their journey or to continue their quest -- a TTRPG cannot play itself. An expectation of participation via player action influences and is influenced by the other factors in the SCT framework, including the social setting, a person's knowledge and attitudes toward participation and learning, the structure of the game, and the context in which the game is played for learning (such as school or work).

2.3 SDT and Motivational Aspects of Gameplay

In addition to SCT, other complementary learning theories can help designers make sense of learning interactions within games. Self-determination theory (SDT), developed by Deci and Ryan (1985), prioritizes three motivational needs (competence, autonomy, and relatedness) behind people when they are making decisions. Based on these three needs, role-playing games may be a powerful tool that can be used to leverage the power of intrinsic motivation in learning scenarios. Competence in content learned from TTRPGs may then be better achieved through players overcoming challenges and engaging in strategic collaborative problem-solving within the game's narrative, enhancing their sense of efficacy and self-concept. Autonomy can additionally be thought of as a built-in feature of this genre, as TTRPGs offer significant narrative choices that impact the game's direction, empowering players with control over their actions and the game itself. Lastly, the concept of relatedness may be tied to the collaborative nature of RPGs, where players, or party members, work together towards common goals and ideally form a strong sense of belonging within the game's social structure.

The idea behind the potential link between role-playing within TTRPGs and the activation of intrinsic motivation stems from the degree of inherent satisfaction derived from the activity itself (role-playing) rather than external rewards. While intrinsic motivation may act as a mediator in achieving learning goals, RPGs also incorporate extrinsic elements such as rewards and achievements for characters that may impact these goals. In the end, the reward structure that is or is not effective in helping students achieve learning goals depends on the individual student.

As part of the conversation about SDT and motivation, it is also important to mention the related concept of *demotivation*, which can arise when the intrinsic needs of competence, autonomy, and relatedness are blocked or otherwise not present. In a game-playing context, overly controlling environments, the lack of engaging content, and insufficient support for social interaction may lead to decreased engagement for some students and hinder the learning process. The way in which TTRPGs might be used for independent exploration and narrative development based on players interests is therefore highly relevant to formal education settings. Allowing the game to unfold in unpredictable, but monitored ways is important for achieving maximum learning potential.

In any designed learning environment, instructional designers seek to facilitate the desired changes in behavior with which learners can demonstrate new knowledge and skills, and perhaps even

changes in attitudes and the learning environment. TTRPGs can therefore potentially activate many of these learning possibilities by creating a malleable game environment that is constructed socially by the players in response to the players' interests, goals, and learning. Rules for player engagement and action exist within TTRPGs but are flexible toward transformative play for the learner. TTRPGs can model with a high degree of fidelity multiple domains for learning, allowing for exposure to content, skills, and expertise simulation that are authentic toward the real-world originals. However, participation is nonetheless required for gameplay to continue as a TTRPG cannot play itself, and participation types and skill is expected to change and grow as a result of continued play.

2.4 Prioritizing Player Actions: The *Ludeme* as a Unit of Participation in Games

Designers of RPGs often intend for a variety of player actions or "moves" to build the foundation of the mechanics that drive gameplay. These actions are essentially the decisions made by players that affect the course of the game and co-create the game experience. They symbolize player autonomy and active participation, which are valuable components of the learning process. In this context, the concept of learning is participatory, extending even to observational activities, such as choosing to be present and staying attentive.

Understanding the concept of participation and action as they apply to game settings evokes a look into the rules of games, which govern both the game mechanics and player actions. From an instructional designer's perspective seeking to improve player participation in learning, it becomes necessary to differentiate between these two terms of *game mechanics* and *player actions*. The works of Mariais et al. (2010) and Montola (2008) provide some distinctions between these terms. First, game mechanics are the processes that are embedded within the game rules that dictate how the game is played, such as the game structure, pieces, equipment, logic, and automated processes that must be done for the game to progress. Player actions, on the other hand, are the discrete points of engagement that players have with the game, which are often known as "moves," "turns," "strategies," "tactics," or, as we use in this paper, "ludemes." Mariais et al. (2010) argue that the breadth and depth of embedded game mechanics directly influences player engagement and learning outcomes, while Montola (2008) emphasizes the emergent nature of player actions, suggesting that the depth of the learning experience in TTRPGs is significantly shaped by the players' choices within the game's narrative and rule constraints. From the standpoint of prioritizing participation in learning-intended games, the term "ludeme" in relation to player action is especially significant, as it serves as an analyzable unit of participation in games.

A *ludeme* is the basic, fundamental unit of play in a game that a player can perform (Parlett n.d.; Stephenson et al. 2021). A game cannot exist without ludemes, just as much as it cannot exist without its mechanics, dynamics, components, and underlying logic, structure, and rules. Ludemes represent the individual interactions that players perform within a game environment, much like learners' actions do in a dedicated learning environment. If the parallels are followed, this further cements the idea that gameplay and learning are, first and foremost, participatory activities. In social settings, these interactions can be observed, refined, and understood, facilitating participants' co-creation of knowledge and understanding. According to Parlett, a particularly valuable characteristic of the ludeme is that as a discrete unit of player action, it can typically propagate from old games into new games in similar ways, much like a *meme* is shared across social media, making player actions directly comparable between games.

In game-based learning contexts, this is valuable for generating comparable evidence of participation across game contexts and the subsequent testing of the effects of different ludemes (i.e., player-learner participation patterns) on achieving learning outcomes. Reusable ludemes, such as *moving,*

capturing, reaching the finish, attacking, defending, upgrading, and *collaborating* often appear within game heuristic systems that commonly appear across games and genres, likewise recycling common types of actions or moves that players can take within games and increasing familiarity for the player. Such heuristics can explain how many games retain similar player actions or looks, despite being designed for separate purposes, themes, or content (Elias, Garfield, and Gutschera 2020; Engelstein and Shalev 2022).

In a learning context, game action heuristics that players know have commonalities with activities associated with learning. In similar ways to playing familiar games, learners typically take repeated actions to learn content and skills in classroom settings, or they make similar "moves" while learning new content. To harness the potential of RPGs as learning tools, it is crucial to understand the variety of player actions and heuristics that learners hold as they relate to the design and study of learning within these games. This invariably involves "looking under the hood" of a game's design to identify both its mechanics and the actions that players take to identify their similarity to the actions that people take in learning environments. By focusing on concretely defining, applying, and testing the game features that drive player engagement and learning, designers can create more effective and engaging RPG experiences.

With this goal in mind, analyzing games at a *ludemic* level (i.e., by identifying and investigating each *ludeme*) can reveal patterns of observable player behavior linked to learning outcomes. From an educational theory perspective, participation in a game can be evidence of learning through demonstrated mastery of the game's activities and completing the experience. However, participation also represents the learning process in that every new experience a person has invoked learning. The more a person participates in a game, the more that their participation allows for changes in their behavior to occur through practice and for mastery to be gained. Investigating a game at the ludemic level allows capturing individual player actions. This gives researchers the ability to track and identify the changes occurring in a person's observed behaviors in how they play the game by using knowledge and skills, and thus, is evidence of their learning.

2.5 Without a Table to Roll On: Toward an Inventory of Ludemes in TTRPGs for Learning

In the previous sections, we held that participation is the primary mechanism by which learning occurs in any designed learning environment, including game-based learning. In consideration of participation, a game typically will not play itself without interaction from players, and thus would not affect learning if there is no participation. Therefore, we approach how *role-playing* games can promote learning from an instructional design perspective based on players' participation.

However, the current research regarding TTRPG development and the use of these games in educational settings lacks a consistently held taxonomy of common *ludemes*, or the actions or rules players follow when participating in TTRPGs. Indeed, many scholars have performed important work to categorize TTRPGs and distinguish them from other game types based on salient features (Hitchens and Dracher 2008; Beyers and Crocco 2016; Torner 2024; Zagal and Deterding 2024) or the learning outcomes that can be achieved from TTRPGs (Cardwell 1995; Daniau 2016; Hammer et al. 2024). Some studies have deeply analyzed unique individual player behaviors that emerge in TTRPGs, such as character development and *role-playing* adoption (Fine 1983); collaborative storytelling and worldbuilding (Tychsen et al. 2005); and performance and improvisation (Mackay 2001). However, few, if any, of the definitions or studies forwarded for TTRPGs in learning contexts have prioritized identifying and analyzing the actual ludemes that players perform as a means to play and advance the game, although such studies have been provided in the context of computer-based RPGs (Bytheway 2015; Chen et al. 2015). Because learning is inherently participatory, well-defined dimensions of

learner participation are essential for investigating gameplay as a mechanism for learning (Dickey 2005; DeBoer et al. 2014).

As such, it is important to identify the existing patterns of participation and action that actually occur within TTRPGs so that these patterns can be compared to known processes and factors of learning. *In other words, before we can speculate on how people will learn and what kind of learning outcomes will occur, we must first reliably know what people will be actively doing via their participation in the game.* Furthermore, by establishing a taxonomy of player actions at the ludeme level as well as these relationships between actions and learning processes, both instructional and game designers can develop games from a common toolkit of expected player behaviors to connect how these actions are expected to achieve desired learning outcomes. Just as a Dungeon Master or player rolls a die on a numbered table of possible outcomes, game designers and educators need a trusted list of potential player actions for their designs that can activate desired learning processes if implemented in a principled way. With this in mind, we suggest that an effective initial approach to the development of a taxonomy of TTRPG player actions is to simply investigate existing games to identify what the game rules allow, disallow, or suggest players do in open-ended role-playing contexts.

To contribute toward identifying and categorizing common player actions in TTRPGs, we conducted a systematic thematic analysis of the published text rules of one game with a large player population, *Dungeons & Dragons (D&D), 5th Edition (5e)*. In this study, we identified, categorized, and analyzed each of the individual player actions, or *ludemes*, that are afforded to players by the official game rules, as codified in the *Player's Handbook*. Because of its popularity and widespread use, *D&D* is often regarded as a quintessential example of TTRPGs in the genre as a representative case. At the time of this study, the game is currently in its 5th Edition, which was released in 2014. Although various rule systems certainly exist for tabletop *role-playing*, *D&D* is also a good case for analysis as it is historically the first TTRPG game that was played by a large population of players and remains the most popular TTRPG game in terms of sales and available associated products. This in turn has influenced the design of most other TTRPG games on the market to some degree (Ewalt 2014; Peterson 2021). Due to its widespread popularity and historical significance in shaping the world of TTRPG play, *Dungeons & Dragons* 5th Edition (*D&D* 5e) serves as the central reference point for this study.

By analyzing *D&D* 5e, the authors aim to build an understanding of how the dual structured and flexible nature of TTRPGs can facilitate diverse learning experiences. However, this does not suggest that *D&D* 5e is the definitive model for all TTRPGs, but rather a starting point for exploring a broader conversation on how different games might support varied learning objectives. We argue that investigating the archetypal case of *D&D* 5e is a good starting point for identifying the congruence of common player actions in TTRPGS and learning mechanisms that are afforded by participating in these actions on the part of the players.

The rules of the game were systematically examined for every singular player action or *ludeme* that was explicitly stated by the game rules. However, in the context of this study, only rules related to the conduct of player-characters (PCs) were included in the analysis. The singular game facilitator, often called the Dungeon Master (DM), is another type of player in the game but fulfills a far different set of functions and actions than typical players do. Instead, the DM is a facilitator who conducts many other decisions related to the conduct of the game exclusive of the players. In many educational settings that use role-playing games, the DM or facilitator role is often played by the teacher who is not engaged in the learning exercise (Garcia 2016). Because of this, the DM role and their tasks are not a part of this analysis directly, but instead studied indirectly to explore players interact with a DM. This allows the study's scope to focus toward PCs as learners within rule-based role-playing experiences. However, due to the complex relationship between players, DMs, and game tools and texts, future studies are merited toward expanding the ludemic analysis of DMs or other game facilitators and facilitation tools.

The taxonomy of ludemes identified through our analysis of *Dungeons & Dragons* 5th Edition is meant to serve as a critical layer in understanding the multifaceted learning dimensions present in TTRPGs. This taxonomy, while comprehensive within the scope of essential gameplay mechanics, represents only a portion of a potential hierarchical model of learning skills, competencies, and capabilities facilitated by TTRPG participation. At the level being presented here, ludemes represent core game actions and decisions, including character movement, combat mechanics, and dialogue choices, that are all necessary for gameplay. These actions directly engage players in the game's flexible narrative and strategic design framework, while laying the groundwork for more complex learning dynamics.

Beyond this foundational layer, there is potential for a mixture of more nuanced "tiers" of ludemes that correspond to higher-order thinking, cognitive, metacognitive, and executive function skills. Examples might include advanced problem-solving strategies; narrative analysis and creation; and collaborative decision-making processes, which all reflect a deeper level of engagement with the game's content and the social interactions born out of play. These types of "advanced ludemes" would match cognitive skills like memory and reasoning, metacognitive skills involving self-reflection and regulation, and executive functions such as planning and flexibility to the actions in the game.

It is important to differentiate between ludemes that are necessary for the main mechanics of gameplay and those that potentially enhance the learning experience but are not essential for game participation. The former is sufficient to engage players in the basic interactive narrative and rule-based structure of TTRPGs, forming the core of our current analysis. The latter representing higher-order skills and executive functions, while valuable, fall outside the immediate scope of this paper due to their less direct impact on essential gameplay mechanics. This distinction between necessary and sufficient ludemes in the context of TTRPGs points to the layered complexity of game-based learning environments. It highlights the vast potential for TTRPGs to facilitate a wide range of learning outcomes, from basic procedural knowledge to sophisticated cognitive and social skills. To this point, future research is merited that could further delineate these layers, exploring the interplay between game mechanics, player actions, and the broader spectrum of learning outcomes they may activate.

We recognize that there are undoubtedly higher-order actions taken by players that are not specified in a game's printed rules (e.g., strategy, cognitive tasks, metacognition). However, for the purposes of this paper, only specified player actions in the rules are captured as they appear in the source text, and related higher-order actions are addressed as learning processes when appropriate. Other actions and player experiences certainly exist and should be studied in future work but are beyond the scope of this study. The rules document of any game is typically the first and sometimes only resource that players use to familiarize themselves with a game and the rules of action. Thus, it is a useful exercise to investigate the intended behaviors of players from the perspective of what the design immediately affords, and this study is framed in this way. Additional higher-order actions may certainly emerge from a game, but occur as a player completes and masters the fundamental game actions that are prescribed in the game rules. Therefore, a productive first step in this work is to identify the fundamental ludemes that a game affords through its design, which is codified by the rules documentation and structure.

3. METHOD

3.1 Source Text

The entire text of the *Player's Handbook* of *Dungeons & Dragons, 5th Edition* (Wizards of the Coast 2014) was analyzed in this study for the presence of ludemes. This text was chosen as a representative

case of TTRPGs in general and was assumed to contain common ludemes in TTRPG play. Any text content appearing within the pages of this book was eligible to be coded as having the presence of a *ludeme*.

Additional rules texts for the *D&D* 5e game exist, namely the *Dungeon Master's Guide* and the *Monster Manual,* along with multiple expansion sourcebooks such as *Tasha's Cauldron of Everything*. Although these texts likely contain additional basic and advanced rules for the role of "player" (and not just the Dungeon Master), these texts were not analyzed and are outside of the scope of this study. This was decided because many players of *D&D* only use the *Player's Handbook,* and it can therefore be safely assumed that most of the basic rules for play are contained solely in the *Player's Handbook*. Additionally, the qualitative analysis of only the *Player's Handbook* was a sizable task for two researchers to complete toward identifying common TTRPG ludemes, within the scope of work for one journal article.

3.2 Procedure for Ludemic Analysis

The study followed a basic qualitative thematic analysis procedure (Thomas 2006; Merriam 2009) that inductively identified generalizations from the data. This inductive process differs from deductive processes like experimental design and hypothesis testing, as it allows for the deep comparison of data points to identify similarities and differences. Similar data points are increasingly assembled to allow the categorization of similar data and allow generalized interpretations of the data to emerge (Thomas 2006). Such "from the ground up" approaches to data analysis allow for the systematic theorization of how the data are related without any predetermined categorization schemes (Charmaz 2006).

The procedure of identifying, categorizing, and interpreting ludemes from the game rules (i.e., Ludemic Analysis) consisted of the following steps: (1) the *D&D 5e Player's Handbook* was coded page by page for the presence of ludemes, resulting in coded data points of every instance of a player action; (2) each coded data point was compared categorically based on the similarity and differences of player actions performed; (3) common data points were assembled into categories of ludemes based on similarity; (4) similar ludemes were collapsed into supercategories of player actions based on similarity; and (5) the supercategories of ludemes were aligned with known educational processes and factors that influence the achievement of learning outcomes. The full qualitative analysis procedure is depicted in Figure 2.

Before textual coding began, operational definitions were determined for the two key constructs: *rules* and *ludemes*. Guided by multiple useful definitions for game rules (Salen and Zimmerman 2003; Elias, Garfield, and Gutschera 2020), we define a *rule* for TTRPG play as a statement in official game rules document that dictates how a game operates, how the game is structured, and what players may or may not do. As a type of a rule, we defined a *ludeme* as any command or rule in a game of what a player should "do" to play the game.

This definition of ludeme led to multiple inclusion criteria before text coding began. An item was considered a *ludeme* if it met any of the four following operational criteria: (1) any statement that expressly uses a verb or process in reference to a player (via process coding from Saldaña 2021); (2) any statement says something that a player potentially can or cannot "do" in the 3rd person (e.g., "players can choose to buy starting equipment for their character"); (3) any specific direction given to a player in the 2nd person (i.e., "roll a d20 and add your modifier"); (4) any noun in the text where a player action is inferred, but not expressly stated (e.g., "A passive check is a special kind of ability check that doesn't involve any die rolls", 5e *Player's Handbook,* 175). To prevent redundancy and over-coding for this study, exclusion criteria included any ludemes that were provided as specific examples of cases of player-character ludemes (e.g., "swimming" and "climbing" were not included in the ludeme of "special movement," as they were provided in the text as examples of special movement).

Figure 2. Ludemic analysis procedure: qualitative coding and categorization steps
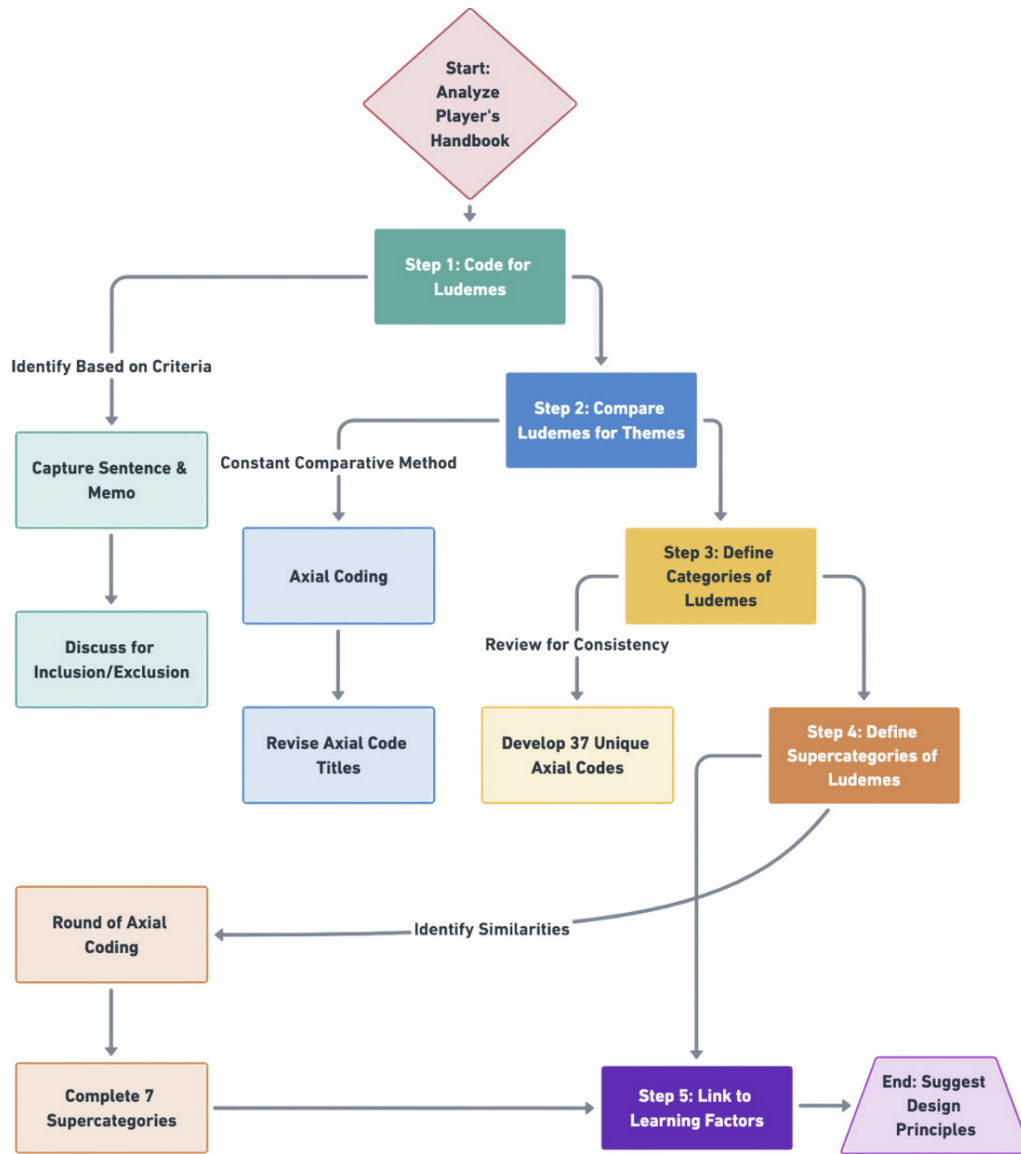
The coding unit was at the sentence level, meaning that a data point was created with the text of the entire sentence in which a ludeme was identified. Data points were entered as rows in a Microsoft Excel spreadsheet and analyzed within the same software.

Step 1. Identified Ludemes. The first step of the analysis was to code the source text for every ludeme present within the text. Both authors served as the researchers in the data coding and analysis process. The researchers read the source text line by line and identified any ludeme cases in the text based on the inclusion criteria. For ludeme cases, the researchers discussed whether to code or not code a ludeme for inclusion in the study. When a ludeme was identified, the full text of the sentence was captured, as well as a written memo by the researcher describing the actions that are performed

by the player in the text. In addition, in line with a constant comparative methodology for qualitative analysis (Glaser and Strauss 1967), the researchers wrote additional memos on their observations that were made about each code on how it was similar and different to other codes that were encountered in the analysis.

As a result of the first round of coding from the source text, 379 individual ludemes were identified. Due to copyright restrictions, the coded sentence segments of the source text are not printed in this study, as the sentence segments consisted of a large portion of the source text.

Step 2. Compared Common Themes of Ludemes. After every ludeme was coded (n = 379), each coded ludeme data point was analyzed for similarity with other ludemes. A constant comparative method was used (Glaser and Strauss 1967), in which each code and any associated notes and memos were compared with other codes based on their similarities and differences. In this step, axial coding was employed to make formal connections between ludemes that were similar. The titles of the axial codes represented a commonality between the ludemes in the category. Additionally, because of constant comparison between codes, the titles of the axial coding categories were frequently revised by the researchers to better represent the ludeme categories.

Step 3. Defined Formal Categories of Ludemes. The axial codes for each of the 379 original ludeme codes were reviewed for consistency toward defining formal categories of ludemes based on similarity. 37 unique axial codes were ultimately developed, which represented categories of ludemes based on similar common player actions within that category.

Step 4. Defined Supercategories of Ludemes. After the 37 categories of ludemes were determined, another round of axial coding was conducted to identify similarities between the categories. From this phase of coding and refinement, 7 "supercategories" of ludemes were identified, based on common similarities between the categories.

Step 5. Linked to Learning Factors and Processes. After the supercategories of ludemes were defined, the researchers identified similarities between the types of ludemes engaged in by players and known factors that influence learning from an SCT learning perspective. Finally, the authors suggested principles for design for each supercategory based on these associations.

4. RESULTS: LUDEMES AND LEARNING IN NARRATIVE TABLETOP ROLE-PLAYING GAMES

37 unique categories of ludemes were identified through axial coding in Steps 2 and 3 of the analysis process. Each of these ludemes represents individual tasks, activities, or functions that players are instructed to do in the game rules at some point during play. With TTRPGs, it is important to remember that not every ludeme will be encountered in every session of play, and some ludemes may never be encountered by some players depending on their style of play. Additionally, some game rules that were coded belonged to two or more categories of ludeme, as they represented actions being taken in combination.

Furthermore, seven supercategories of ludemes were identified during the analysis process. Each supercategory consisted of ludemes that all had a similar, yet individually different function or action that a player performed in the game. Within each of these "families" of ludemes represented in the supercategories, there are associated parallel learning processes that accompany each type of participation. From an SCT learning perspective, the players, the DM, and game designers can

manipulate learning factors that are aligned with the types of activity that are being performed in the ludeme to maximize learning and achievement.

Each ludeme supercategory that was identified within the study is described in Table 1, with examples of individual ludemes that fall within the category being provided as well. A description of each individual ludeme (level 1) is not provided in Table 1 for brevity but are each expanded in Appendix I with a description of the ludeme.

Table 1. Categories of Ludemes (Player Actions)

Where Action Occurs	Level 2: Ludeme Supercategories	Level 1: Individual Ludemes (Player Actions)	Associated Learning Factors and Processes
Layer 1: In-Game Actions	**1. Performing an in-game action (in-character)** Total number of ludemes: 172	• *Traveling* • *Exploring* • *Communicating with NPCs* • *Fighting/Combat* • *Resting* • *Acquiring/Using Items* • *Building* • *Maintaining* • *Improvising* • *Problem Solving* • *Deciding* • *Meeting Game Goals* • *Encountering*	• Modeling and simulation of content, skills, expertise, and situations • Simulation of social interactions and settings • Conceptually integrated and embedded content or skills • Situated cognition • Metacognition • Repeated practice • Manipulation of environment • Perception, observation, and internalization
	2. *Role-playing* (in-character) Total number of ludemes: 57	• *Creating Narrative* • *Worldbuilding* • *Descriptive Role-playing* • *Active Role-playing* • *Flourishing* • *Staying in Role (Inspiration)*	• Narrative use in learning • Social interaction, social mediation of game • Engagement and fun

Layer 2: Out-of-Game Actions	3. Receiving information and instructions (out-of-game) Total number of ludemes: 49	▪ *Receiving Information or Instructions from DM* ▪ *Seeking and Receiving Adjudication from DM* ▪ *Receiving Information from External Materials* ▪ *Receiving Information from Other Players*	● Declarative and procedural knowledge development and use ● Media and technology use ● Using gained knowledge (via player actions / ludemes) ● Feedback mechanisms (adjudication from DM, cycles of information seeking and receiving) ● Situated cognition (using knowledge/info in contexts)
	4. Resolving actions and uncertainty Total number of ludemes: 110	▪ *Sequencing Activities* ▪ *Rolling Dice* ▪ *Evaluating Outcomes* ▪ *Resolving Actions*	● Decision making and problem solving ● Authenticity and high fidelity to real-world phenomena ● Opportunity for repeated practice ● Experiencing consequences and cause/effect relationships ● Feedback mechanisms ● Metacognition
	5. Realizing a character Total number of ludemes: 144	▪ *Setting Character Appearance* ▪ *Setting Character Attributes* ▪ *Determining Character Backstory* ▪ *Advancing the Character (Leveling Up)* ▪ *Setting Character Goals* ▪ *Expending Resources* ▪ *Revising Character Sheets*	● Learner agency and self-efficacy ● Motivation ● Identity & sense of belonging ● Observation and internalization ● Self-realization ● Influence of actions on the environment
	6. Table talking Total number of ludemes: 33	▪ *Teaming Up* ▪ *Making Group Decisions and Goals*	● Social and collaborative learning ● Metacognition ● Reflection and transfer
	7. Serving as DM Total number of ludemes: 5	*Someone has to do it!* Note: This category was derived from only the text of the *D&D* 5e *Player's Handbook*. Most rules for performing the role of DM in the game are located in the *Dungeon Master's Guide*, a separate text that was not analyzed as it was out of scope of this study.	● Facilitation ● Guiding ● Feedback mechanisms ● Reflection and transfer

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Each of the seven ludeme supercategories that were identified in the study are discussed in the following sections. Within each supercategory, a description of the observed individual ludemes (i.e., player actions) is provided, the learning processes and factors that are activated by this type of ludeme are discussed, and design principles for building TTRPGs for learning are forwarded.

4.1 Performing an in-game action (in-character)

Performing in-game actions in a TTRPG context is a process that encapsulates ludemes such as traveling, communicating, fighting, problem-solving, and meeting game goals. This supercategory of player action aligns well with various Social Cognitive Theory (SCT) principles.

Starting with goal setting, players engage in explicit and implicit goal setting when they perform in-game actions (Locke and Latham 2006). Explicit goals may include completing a quest or defeating a monster. In contrast, implicit goals may include improving character skills or strengthening relationships with non-player characters (NPCs) or other party members. Goals may also represent a blend of implicit and explicit motivational drivers. Goal-setting processes relate to the activation of self-regulated learning (SRL), as players monitor progress, adjust strategies, and respond accordingly to challenges that arise during gameplay (Zimmerman 1989). This supercategory of ludeme in TTRPGs is a practical demonstration of the SCT concept of forethought, where individuals anticipate outcomes and set goals accordingly (Bandura 2001).

The performance of in-game actions is also intimately related to a player's level of self-efficacy. Consider examples that involve negotiating a peace treaty between warring factions, deciphering an ancient script, or successfully navigating a treacherous mountain pass. Performance or mastery experiences (which include the successful completion of tasks) within the game serve to boost confidence, increasing the player's belief in their ability to tackle similar or even more complex tasks in future gameplay (Bandura 1997). This theoretical example of improved self-efficacy may also be compounded by experiences where players develop self-efficacy through vicarious experiences (such as observing other players' succeeding), verbal persuasion (encouraging words from party members or the DM) and managing their physiological and emotional states during gameplay (Schunk 1995).

Cognitive and affective processes are also heavily engaged during in-game actions. The ludeme of problem-solving requires players to pay attention to the details presented by the DM, recall relevant information from their character's prior knowledge, and devise a solution effectively (Anderson 1995). The motivation to solve problems may stem from an innate desire for character advancement or achieving a shared group goal.

Lastly, performing in-game actions provides a multitude of opportunities for observational learning. Players observe the actions and strategies of others, learning new ways to approach challenges or handle interactions (Bandura 1971). This is particularly crucial in mixed-experience groups, where novice players can learn from experts (Vygotsky 1978). The socio-cultural context of the game world also shapes the players' behavior and learning (Bandura 1986). As exists in life outside the game, there are societal norms and cultural values within any game world, especially one that is dynamically socially constructed. These norms and values can influence how players interact with NPCs or handle moral dilemmas. This engages players in a complex process of social negotiation and cultural understanding, aligning with SCT's emphasis on the social and cultural factors influencing behavior and learning.

Suggested Design Principles for Learning:

- Use scaffolding to embed opportunities for varied and increasing complexity. Tasks can allow players to start with simpler tasks to build their self-efficacy and gradually introduce more complex tasks that push them to improve their skills and strategies.
- Include various NPC (non-player character) interactions that require different communication strategies. An example might be negotiating with a stubborn dwarf leader, which could require different skills than persuading a curious elf child. This variability in social interaction would require players to learn different communication strategies.

4.2 Role-playing (in-character)

Role-playing in character within a TTRPG can be seen as a manifestation of intrinsic motivation, which is a critical element of Self-Determination Theory (Ryan and Deci 2000). Viewed through this lens, it can be said that players embody their characters not merely for the game's explicit rewards but also for the internal satisfaction derived from exploring a character's personality and narrative. This phenomenon can drive players to engage more deeply with their roles in the game, thereby enhancing their learning experience (Ryan, Rigby, and Przybylski 2006).

When looking at the action supercategory of role-playing through the lens of Expectancy Value Theory (Eccles et al. 1983), the players' expectation of success and the value they attach to the successful portrayal of their characters can significantly influence their engagement and performance. Players who expect to role-play their characters well and place a high value on successful role-play are more likely to invest effort and persist in their role-play (Wigfield and Eccles 2000). Through this dynamic, role-playing starts to benefit from the impact of embodied cognition (Wilson 2002), where physical and emotional engagement in character portrayal could enhance cognitive processing and learning. The emotional investment required to authentically represent a character's feelings and reactions could also deepen the player's empathetic understanding and interpersonal skills (Goldstein and Winner 2012).

Suggested Design Principles for Learning:

- Allow space for player agency and character development so that players have the freedom to make meaningful choices that affect their characters and the game world itself.
- Introduce moral dilemmas or ethical choices that challenge players' decision-making skills and encourage reflective and reflexive thinking. Instead of having obvious "right" or "wrong" choices, these scenarios might push players to consider various perspectives and consequences, including those of their party members.

4.3 Receiving information and instructions (out-of-game)

As the DM describes scenarios or creates rules, players must hear and process this information and store it in their short-term memory and determine which important elements they need to store in their long-term memory for future retrieval. These processes are in alignment with Information Processing Theory (Miller 1956; Atkinson and Shiffrin 1968), since players are constantly receiving,

encoding, storing, and retrieving information during gameplay. This active processing enhances their understanding and retention of the game's mechanics and narrative (Baddeley 1992).

The reception of out-of-game information and instruction also relates to the principles of Direct Instruction (Rosenshine 1986). Explicit teaching of game mechanics, character development, and strategies by the DM or more experienced players is something that allows players to gain a clear understanding of the knowledge in the gameplay, often to a degree that allows the immediate application of the new knowledge. This not only increases players' proficiency but also supports their self-efficacy in gameplay (Bandura 1986).

Receiving information and instruction can also be seen through the lens of the Zone of Proximal Development (ZPD) proposed by Vygotsky (1978). This concept postulates that learners can achieve more with guidance and collaboration than they can independently. In a TTRPG setting, receiving instructions from the DM or collaborating with other players can aid in bridging the gap between a player's current abilities and potential development. The presence of guidance and instructions is also in alignment with the concept of guided discovery learning (Bruner 1961), wherein players explore the narrative and mechanics of the game, receiving support and scaffolding from the DM or fellow players as they go.

Suggested Design Principles for Learning:

- Incorporate explicit and implicit instructional elements. While players of games often learn through direct instruction (like a guide or manual), there is an additional benefit to learning through indirect instruction (learning by doing and from the consequences of their actions).
- Use a "learning by doing" mechanism instead of front-loading all the rules and mechanics. As demonstrated in the taxonomical representation of player actions in this paper, RPGs may have numerous rules and mechanisms to learn. Gradually introducing them as players encounter relevant situations in the game requires an experienced DM, but this approach aligns with the concept of situated learning and can enhance the players' deeper understanding and retention of game rules over time.

4.4 Resolving actions and uncertainty

Resolving actions and uncertainty falls under the main category of "out-of-game" player actions, but there is a significant amount of overlap between it and performing actions in-game. For example, the construct of self-efficacy, as highlighted by Bandura (1986), plays a significant role in this player action supercategory. Players' belief in their ability to successfully navigate challenges and make effective decisions in uncertain situations is central to the gameplay. Successfully resolving actions and uncertainty can strengthen this belief, enhancing their self-efficacy. This is particularly true when players face challenges that require them to stretch their abilities (Schunk, 1995).

This player action supercategory also taps into specific problem-solving strategies that take the cognitive load taken on by the player(s) into account. The nature of TTRPGs often requires players to engage in complex problem-solving under conditions of uncertainty. In doing so, players have to manage their cognitive resources effectively to process the information at hand and arrive at a solution, demonstrating the principle of intrinsic cognitive load (Paas and van Merriënboer 1994; Sweller 1988).

The process of resolving actions and uncertainty is also connected to the concept of metacognition, or "thinking about thinking" (Flavell 1979). Players need to monitor and control their

cognitive processes to navigate the game world effectively. These processes require players to reflect on their understanding, plan their actions, monitor their progress, and adjust their strategies based on the outcomes (Brown 1987).

Suggested Design Principles for Learning:

- Embracing uncertainty and randomness in game design can be a conscious decision. These elements can increase player engagement by adding unpredictability and excitement to the game.
- Integrating probabilistic elements into gameplay is an additional way to teach players about risk and reward. For example, a certain action might have a high potential reward but also a high risk of failure. Players will need to do an internal calculation in order to weigh these factors and make informed decisions as the results will impact both them and their party members.

4.5 Realizing a character

The supercategory "realizing a character" within a TTRPG context provides an array of opportunities for players to engage in learning processes. Starting with learner agency and self-efficacy, the act of realizing a character involves player decisions in regard to all aspects of the character's development, which can range from deciding on a character's appearance and attributes to determining the backstory and setting goals for the character. This process actively engages the learner's sense of agency, as they have control and ownership over their character (Hmelo-Silver et al. 2007). It also promotes self-efficacy as players see the outcomes of their decisions reflected in their character's abilities and growth (Bandura 1997).

Motivational theory also plays a significant role in this process. Creating and developing a character is an inherently motivating task when players are driven by the desire to create a unique and capable character. In accordance with Expectancy-Value Theory, which posits that individuals are motivated to engage in tasks that they value and expect to be successful at (Wigfield and Eccles 2000), players are likely to value the task of character realization due to its immediate impact on their game experience and the expected success of creating a character that can effectively navigate the game world.

One of the most significant contributions of character realization to improving the climate of education environments is the ways in which it intersects with the development of identity and a sense of belonging. Through game characters, players explore different aspects of identity, such as race, gender, profession, and personality. They can also use this game feature to express their creativity and personal interests, fostering a sense of individuality and belonging within the game world (Gee 2003). This exploration of identity can also have positive implications for the players' real-world self-concept and identity formation, particularly for younger players (Subrahmanyam and Smahel 2011).

By creating, developing, and refining their characters over time, players also engage in a process of self-exploration and self-realization (Maslow 1968). This process can also facilitate the development of skills related to self-regulation and metacognition, as players reflect on their characters' growth and make decisions about future development (Zimmerman 2002).

Suggested Design Principles for Learning:

- Encouraging character customization and development with meaningful impact on gameplay (e.g., character traits, abilities, and stats that affect game outcomes) is a design feature that may enhance a player's sense of agency, belonging, and identity within the game.
- Implementing a detailed character progression system where players can see the direct impact of their actions and decisions on their character's skills and abilities would be a complicated but valuable design element. This system should allow diverse character paths to unfold, catering to different play styles and learning preferences.

4.6 Table talking

In the context of SCT, *table talking* involves a significant amount of social, collaborative learning. As players discuss game events, mechanics, and strategies, which are all forms of collaborative learning, they exchange ideas, learn from each other, and collaboratively problem-solve, aligning with the SCT principle of reciprocal determinism (Bandura 1986). These interactions also contribute to the development of collective efficacy, where the belief in the collective's ability to accomplish tasks is cultivated (Bandura 2000).

Table talking also provides opportunities for players to reflect on game experiences and may aid in the transfer of that learning to other contexts. For example, when players discuss real-life topics, they could be making connections between the game and their real-life experiences. This aligns with the SCT's emphasis on the role of cognitive processes in learning and the idea that learning is not only behavioral but also involves deeper processes of understanding and application (Bandura 1986).

The collective decision-making inherent in table talk involves negotiation, perspective-taking, and consensus-building. These skills are valuable life skills as well as holding value in the game.

Suggested Design Principles for Learning:

- Foster collaboration and communication in the game environment. This would encourage players to discuss, negotiate, and make decisions as a group and would enhance the social and collaborative learning experience.
- Encourage cooperative problem-solving by designing challenges that require the unique abilities of multiple characters. This is often a hallmark of RPGs, and it encourages players to communicate, strategize together, and appreciate the diverse strengths of their team.

4.7 Serving as DM

Serving as the Dungeon Master (DM) is a unique role in *D&D* common to many TTRPGs that warrants distinct analysis in future work, but largely falls outside of the scope of this study due to the present focus only on player characters' actions. The DM, sometimes known as a game master or facilitator, holds a pivotal position in the game, acting as the game world's creator, non-player character narrator, rule interpreter, and facilitator of the game world's interactions. Although player-characters do not play the DM role or take any DM actions from a ludeme perspective, it is important to recognize that this role does exist in many TTRPGs and constitutes its own set of ludemes due

to the complex interplay of actions between player-characters, the DM, and the game rules, and supporting materials. In this study, ludeme references to the DM role and their actions in the *Player's Handbook* source text were captured and categorized for posterity. However, the *Player's Handbook* does not describe DM roles in detail. Instead, these rules mostly appear in the complementary source book *The Dungeon Master's Guide, 5e*, which was not analyzed in this study as it was out of scope of investigating player character actions.

From a learning perspective, the DM role provides an array of opportunities for learners. Firstly, it involves a high level of metacognitive activity, as the DM must understand the game's mechanics in-depth, anticipate player actions, manage the game world's complexity, and adjust scenarios in real time based on player decisions. This necessitates a deep understanding of the game rules, player motivations, and narrative design, fostering critical thinking, problem-solving, and decision-making skills.

From a game design standpoint, the DM role impacts the game's structure and progression. A skilled DM can adapt the game to suit the players' skill levels, interests, and learning objectives, providing a tailored gaming experience. They can modify game rules or scenarios, create custom content, and introduce novel challenges or rewards, making the game a dynamic, living system that evolves with player interaction.

While this study by design does not delve deeply into the DM's facilitative role, it is evident that this role provides distinct learning opportunities and unique challenges for game design. Future research might further explore the potential of the DM role and actions that they take in promoting learning in RPGs.

Suggested Design Principle for Learning:

- To maintain flexible and improvisational play opportunities, include a game master or arbiter to resolve potential in-game actions, to provide descriptive narration of the game world, and to promote continued engagement with play (i.e., reminding players to take action).
- Provide substantial onboarding and game master support, when possible (it's a challenging job!)

5. CONCLUSIONS

In this study, we identified and categorized a taxonomy of the unique *ludemes*, or individual player actions that could be performed in a game, that were present in an archetypal TTRPG, the 5th Edition of Dungeons & Dragons. Where most categorization schemes of RPGs are focused on structural features and descriptions of what defines an RPG, a rigorous investigation from an instructional standpoint requires the prioritization of player actions to understand how and why learning occurs. The game's potential as an educational tool is realized when the player engages with the game and adheres to its rules. Ludemes, or player actions, are pivotal markers in the learning trajectory associated with TTRPGs. These discrete gameplay elements can help educators track the evolution of a student's problem solving strategies, collaborative skills, and creative thinking. As such, our analytic tools and vocabulary in the field must support such an investigation. By investigating TTRPGs at the ludeme level, the authors forwarded a method for analyzing game rules to identify a player's possible actions in relation to the possible learning processes that are activated during participation. The definition of ludemes subsequently allows for hypothesis testing of whether learning has occurred as a result of this activity, as well as comparison across games through robust

definitions. In effect, learning occurs as a result of continual play and changing the ways one performs their player actions.

Furthermore, we suggest possible factors and processes of learning that are linked to each ludeme. However, it is important to remember that these connections remain simply hypothesized by the authors, as no empirical study was conducted with players in actual game settings. In fact, the field of educational research in general, continues to suffer from a lack of direct evidence that links the specific elements of a designed learning experience to the theoretical underpinnings that promote achievement (Cook et al. 2003; Wayne et al. 2008). Instead, drawing from our background as instructional designers, our review suggested connections between the empirically observed TTRPG ludemes within the study that are afforded to players by the game rules and the possible factors and processes that are known to facilitate learning.

Dungeons & Dragons 5th Edition was intentionally chosen as the focus of the analysis in the paper due to its broad use as well as its long-standing inspiration for the role-playing design community. Although this study represents only one specific game, we are confident that the player actions outlined in the rules of *D&D* 5e is likely representative of many common rules that span the diversity of TTRPG types and designs. In addition to the sizable task of two researchers systematically extracting ludemes from a large source text like the *D&D* 5e *Player's Handbook*, choosing just one game also intentionally gave the study a narrower focus, which allowed for modeling the analytic method (*Ludemic Analysis*) and testing out its results. In other words, it was simply as good a place as any from a place of familiarity to the researchers to start toward formally analyzing the player's role in a TTRPG game in relation to learning! In addition, it allowed us to refine a method for formal TTRPG analysis that can allow researchers to clearly define the specific game actions that are expected of players, which is especially useful when testing hypotheses of whether people learned from games as a result of their use of ludemes, or a unique combination of playstyle.

By forwarding a taxonomy of ludemes for TTRPGs, we hope that both game designers and educational researchers use this as a framework for testing the links between ludemes and learning in TTRPG play. Instead of viewing games as a singular experience, games can instead be investigated at the *ludeme level* to see how and why learning occurs when specific actions and their combinations are performed by the players. Empirical work that tests and establishes these links is worth all the gold pieces in the realm!

This study suggests significant future work in the field. Primarily, similar analyses on ludemes and their links to learning processes and outcomes should be conducted on an expanded list of TTRPG games. Furthermore, the Dungeon Master role was not thoroughly explored in this analysis, as the focus remained on the player characters and analysis of only the *Player's Handbook* among the game's library of texts. The role of the DM is a complex one, which merits its own additional study on the complex interplay of actions related to game facilitation and the players' ludemic activities. Additionally, future work could identify similarities between ludemes across games, as Parlett (n.d.) suggests that ludemes can easily be adopted from older games into newer games. If this is indeed the case, the field needs to continually grow its evidence base on the effectiveness of educational TTRPGs by empirically testing how and with what effect people learn from ludemes in varied game contexts, themes, and content. Although the analysis in this study was singly centered on *D&D* 5e, the field would also benefit from additional ludeme-level analysis of TTRPGs and larps that are expressly designed for learning will be particularly valuable for the field. Finally, it will also become increasingly important to establish programs of research that investigate emergent player actions and behaviors that are outside of the ludemes specifically outlined in TTRPG game rules, such as higher-order strategies and play styles that are assumed by players.

The primary job of an instructional designer is to match the planned actions of learners to the intended learning outcomes. For this to occur, there must be at least a hypothesized or theoretical link between the actions that will occur within the designed experience and the learning that will occur. To date, TTRPGs have shown great promise in facilitating learning, but designers have lacked a robust collection of evidence-based design principles for how to craft TTRPG games for learning. By investigating the player actions of the "world's most popular role-playing game," we hope to promote the further development of an inventory of research-based ludemes for fostering player achievement. In turn, we hope that these ludemes can be implemented and subsequently tested for learning and achievement when they are used in the service of learning.

Ultimately, this work pushes the field toward more evidence-based design principles for effective TTRPG designs for learning in all contexts (formal, informal, professional), as well as rigorous methods for formal game analysis and testing for learning contexts. The promise of role-playing games toward learning achievement is at an all-time high, but researchers and designers alike need to push the field's knowledge base past anecdotal accounts of play into more evidence-based and systematic design. This is critical for TTRPGs and role-playing methodology, in general, to be more widely accepted in both formal and informal educational settings. Designs must be testable, designed based on known learning principles, and demonstrably beneficial for learning.

This paper contributes an additional step toward this work of developing a framework of TTRPG player actions that activate learning processes; and presents a new method for formal ludeme-level analysis of complex role-playing games. It also advances principles for the design of effective learning experiences using TTRPGs. After the completion of this study, we are extremely excited about the future that gamers, designers, and educators can craft together using flexible and high-resolution role-playing methods that simulate scenarios and processes for learning!

6. CONFLICTS OF INTEREST

The authors report no conflicts of interest related to the content of this article.

REFERENCES

Abbott, Matthew S., Kimberly A. Stauss, and Allen F. Burnett. 2022. "Tabletop Role-playing Games as a Therapeutic Intervention with Adults to Increase Social Connectedness." *Social Work with Groups* 45, no. 1: 16-31. https://doi.org/10.1080/01609513.2021.1932014

Aldritch, Clark. 2005. *Learning by Doing, A Comprehensive Guide to Simulations, Computer Games, and Pedagogy in e-Learning and other Educational Experiences.* New York: John Wiley & Sons.

Anderson, John R. 1995. *Learning and Memory: An Integrated Approach*. New York: John Wiley & Sons.

Anderson, Terry, and Jon Dron. "Three Generations of Distance Education Pedagogy." *International Review of Research in Open and Distance Learning* 12, no. 3 (2011): 80-97.

Arenas, Daniel Luccas, Anna Viduani, and Renata Brasil Araujo. 2022. "Therapeutic Use of Role-Playing Game (RPG) in Mental Health: A Scoping Review." *Simulation & Gaming* 15, no. 3: 285-311.

Atkinson, R.C., and R. M. Shiffrin. 1968. "Human Memory: A Proposed System and its Control Processes." In *The Psychology of Learning and Motivation* (Volume 2), edited by Kenneth W. Spence and Janet Taylor Spence, 89-195. Cambridge, MA: Academic Press.

Baddeley, Alan. "Working Memory." *Science* 255, no. 5044 (1992): 556-559.

Bandura, Albert. 1971. *Social Learning Theory*. New York: General Learning Press.

———. 1986. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Hoboken, NJ: Prentice-Hall.

———. 1991. "Social Cognitive Theory of Self-Regulation." *Organizational Behavior and Human Decision Processes* 50, no. 2: 248-287.

———. 1997. *Self-Efficacy: The Exercise of Control.* New York: W.H. Freeman.

———. 2000. "Exercise of Human Agency through Collective Efficacy." *Current Directions in Psychological Science* 9, no. 3: 75-78.

———. 2001. "Social Cognitive Theory: An Agentic Perspective." *Annual Review of Psychology* 52, no. 1: 1-26.

Barab, Sasha A., Melissa Gresalfi, and Adam Ingram-Goble. 2010. "Transformational Play: Using Games to Position Person, Content, and Context." *Educational Researcher* 39, no. 7: 525–536. https://doi-org.prox.lib.ncsu.edu/10.3102/0013189X10386593

Barron, Brigid. "When Smart Groups Fail." *Journal of The Learning Sciences* 12, no. 3 (2003): 307-359. https://doi.org/10.1207/S15327809JLS1203_1

Beyers, Andrew, & Francesco Crocco. 2016. "Introduction." In *The Role-Playing Society: Essays on The Cultural Influence of RPGs*, edited by Andrew Byers and Francesco Crocco, 1-19. Jefferson, NC: McFarland.

Bowman, Sarah Lynne. 2010. *The Functions of Role-Playing Games: How Participants Create Community, Solve Problems and Explore Identity*. Jefferson, NC: McFarland.

Bowman, Sarah Lynne, and Karen Schrier. 2024. "Players and Their Characters in Role-playing Games." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Bransford, John D., Ann L. Brown., and Rodney R. Cocking. 2000. *How People Learn: Brain, Mind, Experience, and School.* Washington, DC: National Academy Press.

Brown, Ann L. 1987. "Metacognition, Executive Control, Self-Regulation, and Other More Mysterious Mechanisms." In *Metacognition, Motivation, and Understanding*, edited by F. E. Weinert & R. H. Kluwe, 65–116. Mahwah, NJ: Lawrence Erlbaum Associates.

Brown, John Seely, Allan Collins, and Paul Duguid. "Situated Cognition and the Culture of Learning." *Educational Researcher* 18, no. 1 (1989): 32-42.

Bruner, Jerome S. 1961. "The Act of Discovery." *Harvard Educational Review* 31, no. 1: 21-32.

———. 1991. "The Narrative Construction of Reality." *Critical Inquiry* 18, no. 1: 1–21.

Cardwell, Paul. "Role-playing Games and the Gifted Student," *Gifted Education* 11, no. 1 (1995): 39-46.

Charmaz, Kathy. 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis.* Thousand Oaks, CA: Sage.

Clark, Douglas Burton, & Mario Martinez-Garza. 2012. "Prediction and Explanation as Design Mechanics in Conceptually Integrated Digital Games to Help Players Articulate the Tacit Understandings They Build through Game Play." In *Games, Learning, and Society: Learning and Meaning in the Digital Age*, edited by Constance Steinkuehler, Kurt Squire, and Sasha Barab, 279-305. Cambridge, UK: Cambridge University Press.

Collins, Allan, John Seely Brown, and Susan E. Newman. 1989. "Cognitive Apprenticeship: Teaching the Crafts of Reading, Writing, and Mathematics." In *Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser*, edited by Lauren B. Resnick, 453-494. Mahwah, NJ: Lawrence Erlbaum Associates.

Cook, David A., Stanley J. Hamstra, Ryan Brydges, Benjamin Zendejas, Jason H. Szostek, Amy T. Wang, Patricia J. Erwin, and Rose Hatala. "Comparative Effectiveness of Instructional Design Features in Simulation-Based Education: Systematic Review and Meta-Analysis." *Medical Teacher* 35, no. 1 (2013): e867-e898.

Davis, Mark H. "Measuring Individual Differences in Empathy: Evidence for a Multidimensional Approach." *Journal of Personality and Social Psychology* 44, no. 1 (1983): 113–126.

DeBoer, Jennifer, Andrew D. Ho, Glenda S. Stump, and Lori Breslow. "Changing 'Course:' Reconceptualizing Educational Variables for Massive Open Online Courses." *Educational Researcher* 43, no. 2 (2014): 74-84.

Deci, Edward L., and Richard M. Ryan. 1985. *Intrinsic Motivation and Self-Determination in Human Behavior.* New York: Plenum.

Dede, Chris. "Immersive Interfaces for Engagement and Learning." *Science* 323, no. 5910 (2009): 66-69.

Eccles, Jacquelynne. 1983. "Expectancies, Values and Academic Behaviors." In *Achievement and Achievement Motives*, edited by Janet T. Spence, 75-146. New York: W.H. Freeman.

Elias, George Skaff, Richard Garfield, and K. Robert Gutschera. 2020. *Characteristics of Games.* Cambridge, MA: MIT Press.

Engelstein, Geoffrey, and Isaac Shalev. 2022. *Building Blocks of Tabletop Game Design: An Encyclopedia of Mechanisms.* Boca Raton, FL: CRC Press.

Ewalt, David. M. 2014. *Of Dice and Men: The Story of Dungeons & Dragons and the People Who Play It.* New York: Scribner.

Flavell, John H. "Metacognition and Cognitive Monitoring: A New Area of Cognitive–Developmental Inquiry." *American Psychologist* 34, no. 10 (1979): 906-911.

Freeman, Scott, Sarah L. Eddy, Miles McDonough, Michelle K. Smith, Nnadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth. 2014. "Active Learning Increases Student Performance in Science, Engineering, and Mathematics." *Proceedings of the National Academy of Sciences* 111, no. 23: 8410–8415. https://doi.org/10.1073/pnas.1319030111.

Garris, Rosemary & Ahlers, Robert & Driskell, James. "Games, Motivation, and Learning: A Research and Practice Model." *Simulation & Gaming* 33, no. 4 (2002): 441-467. https://doi.org/10.1177/1046878102238607.

Gee, James Paul. 2003. "What Video Games Have to Teach Us about Learning and Literacy." *Computers in Entertainment* 1, no. 1: 1-20.

———. 2002. "Learning by Design: Good Video Games as Learning Machines." *E-Learning and Digital Media* 2, no. 1: 5–16.

Glaser, Barney G., and Anselm L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Mills Valley, CA: Sociology Press.

Goldstein, Thalia R., and Ellen Winner. "Enhancing Empathy and Theory of Mind." *Journal of Cognition and Development* 13, no. 1 (2012): 19-37.

Gredler, Margaret E. 1996. "Educational Games and Simulations: A Technology in Search of a (Research) Paradigm." In *Handbook of Research for Educational Communications and Technology*, edited by David. H. Jonassen, 521–539. New York, NY: MacMillian Library Reference

Hake, Richard R. "Interactive-Engagement Versus Traditional Methods: A Six-Thousand-Student Survey of Mechanics Test Data for Introductory Physics Courses." *American Journal of Physics* 66, no. 1 (1998): 64-74. https://doi.org/10.1119/1.18809.

Hammer, Jessica, Alexandra To, Kat Schrier, Sarah Lynne Bowman, and Geoff Kaufman. 2018. "Learning and Role-Playing Games." In *Role-Playing Game Studies: A Transmedia Approach*, edited by José P. Zagal & Sebastian Deterding, 283-299. New York: Routledge.

———. 2024. "Learning and Role-Playing Games." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Hmelo-Silver, Cindy E., Ravit Golan Duncan, and Clark A. Chinn. 2007. "Scaffolding and Achievement in Problem-Based and Inquiry Learning: A Response to Kirschner, Sweller, and Clark (2006)." *Educational Psychologist* 42, no. 2: 99-107.

Klopfer, Eric, Scot Osterweil, Jennifer S. Groff, and Jason Haas. 2009. *Using The Technology of Today, in The Classroom Today: The Instructional Power of Digital Games, Social Networking, Simulations and How Teachers Can Leverage Them*. Cambridge, MA: Massachusetts Institute of Technology - The Education Arcade.

Knowles, Malcolm S. 1973. *The Adult Learner: A Neglected Species*. Houston, TX: Gulf Publishing Company.

Kolb, David A. 1984. *Experiential Learning: Experience as The Source of Learning and Development* (Vol. 1). Hoboken, NJ: Prentice-Hall.

Koster, Raph. 2005. *A Theory of Fun for Game Design*. Sebastopol, CA: Paraglyph Press.

Lave, Jean, and Eitenne Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press.

Locke, Edwin A., and Gary P. Latham. 2006. "New Directions in Goal-Setting Theory." *Current Directions in Psychological Science* 15, no. 5: 265-268.

Mackay, Daniel. 2001. *The Fantasy Role-Playing Game: A New Performing Art.* Jefferson, NC: McFarland.

Mariais, Christelle, Florence Michau, and Jean-Philippe Pernin. 2010. "The Use of Game Principles in the Design of Learning Role-Playing Game Scenarios." *Proceedings of the 4th European Conference on Games Based Learning*, 462-471.

Maslow, Abraham H. 1943. "A Theory of Human Motivation." *Psychological Review* 50, no. 4: 370-396.

Maslow, Abraham H. 1968. *Toward a Psychology of Being*. Washington, DC: Van Nostrand Reinhold.

Merriam, Sharan B. 2009. *Qualitative Research: A Guide to Design and Implementation.* New York: Wiley & Sons.

Miller, George A. 1956. "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information." *Psychological Review* 63, no. 2: 81-97.

Montola, Marcus. 2008. "The Invisible Rules of Role-Playing The Social Framework of Role-Playing Process." *International Journal of Role-Playing* 1: 22–36. https://doi.org/10.33063/ijrp.vi1.184

Nicholson, Scott. 2015. "A RECIPE for Meaningful Gamification." In *Gamification in Education and Business*, edited by Torsten Reiners and Lincoln C. Wood, 1-20. New York: Springer. https://doi.org/10.1007/978-3-319-10208-5_1.

Paas, Fred GWC, and Jeroen JG Van Merriënboer. 1994. "Variability of Worked Examples and Transfer of Geometrical Problem-Solving Skills: A Cognitive-Load Approach." *Journal of Educational Psychology* 86, no. 1: 122-133.

Parlett, Dave. N.d. "What's A Ludeme? And Who Really Invented It?" Parlett Games.

Peterson, Jon. 2021. *Game Wizards: The Epic Battle for Dungeons & Dragons*. Cambridge, MA: MIT Press.

Plass, Jan L., Richard E. Mayer, and Bruce D. Homer. 2020. *Handbook of Game-Based Learning*. Cambridge, MA: MIT Press.

Prince, Michael. 2004. "Does Active Learning Work? A Review of the Research." *Journal of Engineering Education* 93, no. 3: 223-231. https://doi.org/10.1002/j.2168-9830.2004.tb00809.x

Rosenshine, Barak. 1986. "Synthesis of Research on Explicit Teaching." *Educational Leadership* 43, no. 7: 60-69.

Ryan, Richard M., and Edward L. Deci. 2000. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American Psychologist* 55, no. 1: 68-78.

Ryan, Richard M., C. Scott Rigby, and Andrew Przybylski. 2006. "The Motivational Pull of Video Games: A Self-Determination Theory Approach." *Motivation and Emotion* 30, no. 4: 344-360.

Salen, Katie, and Eric Zimmerman. 2003. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press.

Schank, Roger. 1990. *Tell Me a Story: Narrative and Intelligence*. Evanston, IL: Northwestern University Press.

Schunk, Dale. H. 1995. "Self-Efficacy, Motivation, and Performance." *Journal of Applied Sport Psychology* 7, no. 2: 112-137.

Squire, Kurt. 2006. "From Content to Context: Videogames as Designed Experience." *Educational Researcher* 35, no. 8: 19-29.

———. 2008. "Open-Ended Video Games: A Model for Developing Learning for the Interactive Age." In *The Ecology of Games: Connecting Youth, Games, and Learning*, edited by Katie Salen., 167-198. Cambridge, MA: MIT Press.

Steinkuehler, Constance. 2006. "Massively Multiplayer Online Videogaming as Participation in a Discourse." *Mind, Culture, and Activity* 13, no. 1: 38-52.

Stephenson, Matthew, Dennis J. N. J. Soemers., Eric Piette, & Cameron Browne. 2021. "General Game Heuristic Prediction Based on Ludeme Descriptions." In *Proceedings of the 2021 IEEE Conference on Games (CoG)*. New York: IEEE.

Subrahmanyam, Kaveri, and David Smahel. 2011. *Digital Youth: The Role of Media in Development*. New York: Springer.

Sweller, John. 1988. "Cognitive Load During Problem Solving: Effects on Learning." *Cognitive Science* 12, no. 2: 257-285.

Thibodeau, Rachel B., Ansley T. Gilpin, Melissa M. Brown, and Brooke A. Meyer. 2016. "The Effects of Fantastical Pretend-Play on the Development of Executive Functions: An Intervention Study." *Journal of Experimental Child Psychology* 145: 120–38. https://doi.org/10.1016/j.jecp.2016.01.001

Thomas, David R. 2006. "A General Inductive Approach for Analyzing Qualitative Evaluation Data." *American Journal of Evaluation* 27, no. 2: 237-246.

Torner, Evan. 2024. "RPG Theorizing by Designers and Players." In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Vasalou, Asimina, Adam Joinson, Tanja Bänziger, Peter Goldie, and Jeremy Pitt. 2008. "Avatars in Social Media: Balancing Accuracy, Playfulness and Embodied Messages. *International Journal of Human-Computer Studies* 66, no. 11: 801-811.

Vygotsky, Lev S. 1978. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Wayne, Andrew J., Kwang Suk Yoon, Pei Zhu, Stephanie Cronen, and Michael S. Garet. 2008. "Experimenting with Teacher Professional Development: Motives and Methods." *Educational Researcher* 37, no. 8: 469-479.

Wenger, Eitenne. 1999. *Communities of Practice: Learning, Meaning, and Identity.* Cambridge UK: Cambridge University Press.

Wigfield, Allan, and Jacquelynne S. Eccles. 2000. "Expectancy–Value Theory of Achievement Motivation." *Contemporary Educational Psychology 25*, no. 1: 68-81.

Wizards of the Coast. 2014. *D&D Player's Handbook*, 5th Edition. Renton, WA: Wizards of the Coast.

Woods, Timm. 2016. "Raiding the Last Frontier: Overcoming the Language Barrier in the ESL Classroom." In *The Role-Playing Society: Essays on the Cultural Influence of RPGs,* edited by Andrew Byers & Francesco Crocco, 98-121. Jefferson, NC: McFarland.

Zagal, José P., and Sebastian Deterding. 2024. "Definitions of 'Role-Playing Games.'" In *The Routledge Handbook of Role-playing Game Studies*, edited by José P. Zagal and Sebastian Deterding. London: Routledge.

Zagal, José P., Jochen Rick, and Idris Hsi. 2006. "Collaborative Games: Lessons Learned from Board Games." *Simulation & Gaming* 37, no. 1: 24–40. https://doi-org.prox.lib.ncsu.edu/10.1177/1046878105282279

Zimmerman, Barry J. 1989. "A Social Cognitive View of Self-Regulated Academic Learning." *Journal of Educational Psychology* 81, no. 3: 329-339.

———. 2002. "Becoming a Self-Regulated Learner: An Overview." *Theory into Practice* 41, no. 2: 64-70.

APPENDIX I: DESCRIPTIONS OF OBSERVED INDIVIDUAL LUDEMES

Ludeme Supercategory (Level 2)	Individual Ludeme (Player Action - Level 1)	Description
1. Performing an in-game action (in character) Total number of coded ludemes: 172	*Traveling*	Moving a character through the game world, often to reach specific destinations or explore new areas. Represents long-distance (e.g., from town to town) and short-distance (e.g., mere inches or yards during combat) movements in-game.
	Exploring	Interacting with the environment, investigating objects or areas, keeping watch and monitoring, and seeking out new information or opportunities.
	Communicating with NPCs	Exchanging information or dialogues with NPCs or other player characters, either verbally or through written messages.
	Fighting/Combat	Engaging in battles or skirmishes, typically involving strategic decision-making, movements, and dice rolls to determine outcomes. Fighting and combat occur at a micro-timescale, with each player turn representing 6 seconds of in-game time.
	Resting	Pausing active adventuring to recover health, spells, or other resources, as well as perform character development. This may also involve setting up camp or finding an inn.
	Acquiring/Using Items	Searching for, purchasing, or otherwise obtaining items, and employing them strategically in gameplay.
	Building and Developing	Creating structures, crafting items, or developing other tangible assets in the game world. Performing studies, research, or other character development in the game world.
	Maintaining	Sustaining or repairing equipment, fortifications, relationships, or other ongoing concerns.
	Improvising	Coming up with spontaneous actions or solutions in response to unexpected challenges or opportunities. Improvisations are facilitated and adjudicated by the Dungeon Master.
	Problem-Solving	Analyzing a complex situation or puzzle and devising a strategy to overcome it.

	Deciding	Making choices that impact character actions, opportunities, plot direction, or other aspects of the game.
	Meeting Game Goals	Accomplishing objectives set forth by the game's narrative or the DM.
	Encountering	Discovering new creatures, characters, or events, often leads to further actions or decisions.
2. *Role-playing* (In Character) Total number of coded ludemes: 57	Creating Narrative	Contributing to the storyline or plot of the game through character actions and interactions.
	Worldbuilding	Contributing to the development and detail of the game setting, often in collaboration with the DM and other players.
	Descriptive Role-playing	Providing detailed descriptions of character actions, expressions, or surroundings to enrich the game world.
	Active Role-playing	Engaging deeply with the character's persona, making decisions consistent with the character's personality and backstory.
	Flourishing	Adding creative, often non-essential, details or actions that enhance the *role-playing* experience and deepen character immersion.
	Staying in Role (Inspiration)	Consistently acting and speaking as the character, including the use of accents, catchphrases, or mannerisms. Being awarded *inspiration* by the Dungeon Master for strong in-character role-playing.
3. Receiving information and instructions (out-of-game) Total number of coded ludemes: 49	Receiving Information or Instructions from DM	Listening to the DM's narrative, descriptions, and rule explanations.
	Seeking and Receiving Adjudication from DM	Requesting the DM's decision on rules questions or ambiguous situations.
	Receiving Information from External Materials	*(texts/media/game resources/game pieces)* Reading or consulting rulebooks, maps, character sheets, or other game resources.
	Receiving Information from Other Players	Listening to or seeking advice, strategies, or perspectives from fellow players.
4. Resolving actions and uncertainty Total number of coded ludemes: 110	Sequencing activities	Determining the order in which actions occur, is often important for coordinating individual or group actions, or reacting to events.
	Rolling Dice	Using dice rolls to add randomness to game outcomes, often tied to character abilities or difficulty checks.
	Evaluating Outcomes	Assessing the results of actions or events, determining degrees of success or failure.
	Resolving Actions	Finalizing the outcomes of character actions, often involving the interpretation of dice rolls and game rules.

5. Realizing a character Total number of coded ludemes: 144	*Setting Character Appearance*	Choosing physical attributes, clothing, and other visual elements that define the character's look.
	Setting Character Attributes	Determining the character's abilities, skills, strengths, and weaknesses, often guided by race, class, and dice rolls.
	Determining Character Backstory	Creating a personal history for the character that explains their motivations, personality, and place in the game world.
	Advancing the Character (Leveling Up)	Improving the character's abilities or acquiring new ones, usually as a reward for gaining experience points.
	Setting Character Goals	Defining objectives or desires that guide the character's actions and development.
	Expending Resources	Things that exist outside of the game (Hit Dice, etc.) - could be simulated in-game, but are out-of-game character decisions (about the character, not by the character). Making decisions about using character resources such as hit points, spell slots, equipment, or money.
	Revising Character Sheets	Updating the character's written record to reflect changes in attributes, equipment, experience, and other details.
6. Table talking Total number of coded ludemes: 33	*Teaming Up*	Forming alliances or partnerships with other player characters for mutual benefit.
	Making Group Decisions and Goals	Collaborating with other players to decide on a course of action or shared objective.
7. Serving as DM Total number of coded ludemes: 5	Note: Most rules for performing the role of DM in the game are located in the *Dungeon Master's Guide*, a separate text that was not analyzed.	*Someone has to do it!* The activity of managing the game world, the narrative, and the rules. This can involve everything from creating scenarios and playing NPCs to adjudicating rules and moderating player disputes. This is a distinctly different role from the player characters and has its own set of skills and challenges. This was not investigated in depth in this study.

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