

The self-perceived effects of the role-playing hobby on personal development – a survey report

Popular - This article is a survey report of a study conducted between 2010 and 2011 exploring the views of role-playing gamers on how the role-playing hobby has influenced their social and mental development. A socio-pedagogical concept of empathic intelligence was chosen as the theoretical framework based on which a survey questionnaire of nine groups of questions was built. The survey that included both multiple-choice questions and open questions was taken by 161 Finnish active role-players and statistically analyzed. A control group of 106 non-role-players was used to examine the role-players' self-assessment of their own capabilities.

The study showed that the views of role-playing gamers on their hobby and themselves are predominantly positive. The respondents reported that role-playing games had provided them with a good platform for experimenting with different personalities and social roles, and that they viewed the hobby as having improved various skills and traits such as creativity and imagination. The gender of the respondents was an important factor especially regarding the emotional responses evoked by the games, while the other variables played a minor role.

Role-players viewed themselves as more imaginative but less socially adept than the control group. A more active reading hobby was perceived by the role-players as well.

The results of the study suggest that the role-playing gaming hobby provides a good platform for the development of both personal and social skills, and that used correctly, role-playing games have the potential to be used to advance such development.

Keywords: role-playing games, imagination, empathy, empathic intelligence, self-assessment, hobby communities

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1. INTRODUCTION

Role-playing gamers have often been viewed in mainstream culture through negative stereotypes (Curran 2011) such as lacking in social skills (Bowman 2010, Leppälahti 2002). While role-players themselves have often jokingly embraced

such stereotypes, it is undeniable that despite positive development in recent years, role-playing games still carry a burden of years of uninformed negative portrayal in popular media (Curran 2011).

However, role-playing games seemingly incorporate several key elements that would

suggest their potential for positive human development. Role-players form tight social networks (Leppälähti 2002, Piippo 2010), role-playing has successfully been used as a teaching tool (Hyltoft 2008, Karwowski & Soszynski 2008) and by their very nature role-playing games encourage experimentation with different social roles and personality types, as well as the development of imagination. Personal experience from years of role-playing underlined the conflict between the stereotype and the seemingly positive impact of the hobby, leading to this study.

The study undertaken sought to examine the views of active role-players on various aspects of their hobby and compare those views to Arnold's theory of empathic intelligence – a socio-pedagogical concept of healthy mental and social conduct – in order to find out whether the positive influence of role-playing was widely perceived by active role-players, and whether variables such as age, sex, or hobby experience influenced these views. The research questions were posed as follows:

- 1) What level of connection does there exist between the role-playing hobby and empathic intelligence as defined by Arnold?
- 2) How do differences in age, sex and hobby experience show in role-players' views on their hobby?

On the first question it was hypothesized that a perceivable positive connection existed. The hypothesis was based on personal views and experiences that suggested an existing connection between the various elements of the empathic intelligence theory. Due to the exploratory nature of the second question, no hypothesis was posited.

The study was conducted in November 2010 as an anonymous quantitative survey using the University of Helsinki's e-form platform. The intention was to assemble a large amount of data in a fairly short time period, as well as add quantitative research to a field mostly dominated by qualitative methods. Due to the nature of the studied phenomenon, a mixed method combining open questions with statistical analysis was chosen, which brought with it some challenges, but also provided its own strengths. Previous research has shown the usefulness of qualitative methods in the study of role-playing games and role-players, but they can be very time-consuming and thus limit the samples gathered. There is also the problem of

possibly very limited generalisation (Johnson & Onwuegbuzie 2004). Quantitative methods have been used less, but also have their uses, especially in gathering larger data samples. To leave out either aspect would in the researcher's view have severely weakened the research. As Johnson & Onwuegbuzie (2004, 21) state, qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice. Arnold (2005, 132-133) explicitly states that both quantitative and qualitative methods have a place in empathic intelligence research.

Role-players have been studied previously with mixed results, with the research often suffering from small and biased samples (Curran 2011, Leppälähti 2002). The aim of the current study was to utilize a survey method to reach a more balanced group of respondents, which proved successful. At 161 role-players answering the questionnaire, the study has to the author's knowledge one of the largest samples in role-playing research to date. This is mainly due to most researchers employing qualitative methods such as ethnographies and interviews (for example Bowman 2010, Leppälähti 2002, Piippo 2010), in which the samples are smaller but investigated in much more detail.

The study was completed in the University of Helsinki's faculty of education, and was thus also intended to provide scientific grounds to be used when mapping the potential of role-playing as an educational method and tool. This seconded using a socio-pedagogical concept, in this case empathic intelligence, as the foundation of the study's theoretical framework. As discussed later, this presented a major challenge in terms of quantifiability, but was held on to in an effort to bridge the gap between the qualitative and the quantitative – a paradigm that can be seen as crucial in the study of a phenomenon as diverse as role-playing.

Using an online survey, the study sought to gather a wide range of opinions and self-assessments from the respondents in an attempt to find out what they viewed as the beneficial and detrimental effects of the role-playing hobby. In addition to answering the main research question – what kind of potential role-playing games hold for personality development – the survey was also designed to accumulate data to fuel and guide further research. To alleviate some of the problems inherent in self-

assessment, a control group was used in one of the sections of the research.

This article describes the study undertaken. First, the theoretical framework in which the study is set is described, focusing on noted and potential roles of role-playing in the context of Arnold's concept of empathic intelligence. The research method and the choices leading to it are then discussed in the next section, as is the relationship between the two and the survey form itself. In the section the the reliability and validity of the study is investigated, and its strengths and weaknesses reviewed. The next section deals with what are viewed as the most relevant and notable results of the study. These results and their implications are then discussed and conclusions drawn in the final two sections.

2. THEORETICAL BACKGROUND

In her 2005 book *Empathic Intelligence* Roslyn Arnold describes empathic intelligence as an ability to utilize different forms of intelligence and sensitivity to effectively function with other people. Key concepts are combining cognitive and affective experiences as well as the effective utilization of imagination to place oneself in a larger frame of reference regarding other people and the world. While Arnold's theory was primarily written with the fields of education and business in mind, it was considered in this study to be suitable for a more general view of interpersonal relations as well. It must be noted that despite the name of the theory, it's not as such a psychometric theory of intelligence comparable for instance to the different types intelligences presented by Goleman (1995) or Gardner (1983). Rather than a cognitive theory, Arnold's theory is more one of social practice, with a strong ethical and ideological element. Arnold explicitly states that empathic intelligence as a concept is an outcome of liberal, democratic, student-centred educational philosophy (Arnold 2004). Due to this, the study should primarily be seen from the viewpoint of education and the social sciences, rather than psychology or cognitive science. The nature of the theory also sets the theory's position in relation to the study. While Arnold's theory of empathic intelligence served as an important element of the study, its most important function was to provide inspiration and a viewpoint into a complex phenomenon. This was largely due to the difficulties inherent in measuring several concepts

in Arnold's theory, somewhat limiting its use as a foundation for the whole study.

Since a universally accepted theory of role-playing is yet to emerge, the conscious decision was made to narrow the scope of the study down to role-playing as the term is used in everyday language, pertaining specifically to role-playing games. This encompasses traditional tabletop role-playing, live action role-playing as well as so-called freeform gaming, which incorporates elements from the two. The definition means the exclusion of several activities that share similarities with role-playing games, such as improvisational theatre, psychodrama and historical re-enactment. Such activities can be viewed as forms of role-playing, but not as role-playing games (Harviainen 2010). In this study further exploration of the exact differences of role-playing and role-playing games was deemed unnecessary. Participants were made aware of the meaning of the term "role-playing" in the context of the study.

Arnold (2004, 13) defines empathy as "an ability to understand the thoughts and feelings of self and others. [It is] a sophisticated ability involving attunement, decentering and introspection: an act of thoughtful, heartfelt imagination". This definition appears indicative of the way Arnold attempts to combine the psychological with the social in her theory. It resembles those of Rogers (1975) and Goleman (1995) who also see empathy as a very complex phenomenon with both social and mental elements. This is markedly different from for example Eisenberg & Strayer (1987, 5) who simply define empathy as an emotional response. Arnold (2004, 16-17) also points out the difference between empathy and sympathy. She views the former as a far more intricate process than the latter, which merely involves recognizing and sharing similar experiences and relating to another person through them.

Most of the elements that Arnold views as being conducive to the development of empathic intelligence can be found in role-playing games. Below are outlined the most important links between the two.

Arnold emphasizes the importance of narratives, by which she means both written and orally transferred stories, including but not limited to literature, everyday personal stories, games and folklore. She suggests that such experiences increase the viewers capacity for empathy, creativity and imagination and evoke both playful

and ethical speculation. (Arnold 2005.) Bettelheim (1991) and Talib (2002) note that narratives help in the structuring of a developing emotional life and promote self-knowledge and a deeper understanding of one's own life. Regardless of whether a person views or creates the narrative, narratives can help in achieving a wider view of the world. There is also a natural relationship between narratives and empathy: at the heart of experiencing a story is the ability to position oneself in a world created by another. (Arnold 2005.)

The connection between narratives and role-playing is an obvious one. While role-playing is technically not a narrative in a theoretical sense (as it lacks a narrator and a listener) (Heliö 2004), it nevertheless includes characters, events and narrative elements which allow it to be seen as a narrative in the sense in which Arnold uses the term. The nature of role-playing games is suitable for creating story-like structures and the games are often specifically designed to promote this (Pettersson 2005). The goal of role-playing games is often to provide the players with a narrative experience or interpretation of in-game events, and game sessions are often viewed and processed afterwards in story form (Heliö 2004). This creates stories that function in the way Arnold describes, in that they fuel imagination and provide new thoughts to consider. As with other stories, the story created from a game can be interpreted in a multitude of ways, depending on the people describing, experiencing and interpreting the events (Lehrskov 2007). According to Arnold narratives are what allows people to assume different roles, and she mentions children's pretend play as an example. The act of taking roles is an essential part of the human psyche (Bowman 2010) and is a constant element in human interaction (Goffman 1959). Drama educators Luostarinen (1995) and Toivanen (in press) state that the process of trying on different roles allows the layering and reflection of two realities - the everyday and the fictional - and thus promotes the exploration of the self.

However, perhaps the most important connection between role-playing and the narratives described by Arnold is the reason people engage in them. As Flood (2006, 40) puts it:

Role-playing games allow the participants to escape from the conflict, frustrations, disappointments, stresses, and the various

other minor horrors of daily life. It is the doorway through which another world can be reached. A world in which anything is possible and the unsolvable can be solved.

This view is very similar to Arnold's view of speculative thought, using one's imagination to cross the borders of the known, as the peak of cognitive development (Arnold 2005). According to Lieberoth (2006) role-playing has no reality or essence in itself, but instead the role-playing experience exists only in the imaginations of the participants. Montola (2008) mentions an imaginary world as a uniting factor in all role-playing games. Whether live action or tabletop, it can well be said that role-playing cannot exist without imagination, which is always a (if not the most) significant element in a game. Imagination provides the whole process of role-playing with a meaning and makes it possible.

The connection between narratives and role-playing is an obvious one.

Discussing drama Leiber (1995) suggests that it is possible to practice empathy skills by assuming the identity of a character by identifying with them and experiencing their life. This is referred to as *immersion*. While the exact definition and use of the term is debated (see Holter 2007, Lappi 2007), the phenomenon is often described when discussing role-playing games (Choy 2004, Flood 2006, Hopeametsä 2008 to mention a few examples). This ability to immerse oneself in a fantasy is cited by Arnold (2005) to be a prerequisite for empathy. Assuming the role of a role-playing game character, the player in a way becomes the character, for example commonly talking as and about the character from a first person perspective. This suggests a connection to the character more empathic than sympathetic in nature: instead of actively comparing their feelings to those of their character, the player's feelings often merge with the imaginary ones of the character, producing a vicarious experience.

In a wider context, Arnold notes the importance of art in cultivating empathic intelligence. Different forms of art not only allow a person to acquaint themselves with a great variety of feelings, thoughts and ways of acting, but also make it possible to better adjust, express and understand one's values, thoughts and feelings. As Arnold sees

it, quality art in its different forms raises important, profound questions in the reflective mind. Arnold talks about *reading* a work of art, further tying it into the narratives described above. (Arnold 2005.) The question of whether games can be classed as art is a complex one and far beyond the scope of this paper. Video games have been examined from an art point of view (Smuts 2005) and their cultural status has been compared to that of early cinema (Jenkins 2005). J. Tuomas Harviainen (2010) claims that the fact that role-playing games are games does not rule out their potential for being art as well. Jaakko Stenros posits that role-playing has the potential to be art, but while some role-playing games can provide the player with experiences similar to those elicited by art, it does not as a whole fit into the frames of traditional art (Stenros 2010). In the context of empathic intelligence Stenros' comment becomes very relevant, since Arnold focuses especially on the viewer's reactions to a piece of art, instead of the piece in itself. Due to the dual nature of a role-player as both an actor and an observer, these reactions may even be more intense and fruitful in terms of reflection than those elicited when interacting with a static piece of art such as reading a book or watching a play. Whereas in traditional narrative arts the narrator often explicates this inner life to the viewer, this is not necessarily required in role-playing games. Instead, depending on the game and the player it is possible that the player is the sole author of their character's thoughts and feelings (Kim 2004).

This focus on reflection is another aspect apparently tying empathic intelligence and role-playing together. The dynamic, interactive nature of the games enables the player to constantly reflect on both in-game and off-game happenings and adjust themselves in relation to the game world, the other characters and the other players. The character's identity is also consciously developed not only by the player, but by the entire group as well (Bowman 2010). As mentioned above in discussing narratives, the game events and experiences are often reflected on and analyzed afterwards. This is especially true with mentally straining games (Hopeametsä 2008, Montola 2010) and educational role-play, both in which a post-game debriefing session is usually seen as near mandatory.

As a final positive link there is the importance of a supportive community. Arnold (2005) notes the importance of positive communities as paramount in the development of empathic intelligence and

vice versa. The shared enthusiasm and engagement and shared narratives contained in the concept of empathic intelligence help promote the development of like-minded communities, while the communities in turn help develop the elements conducive to their formation. It's typical for people to join communities with shared interests and views, and our membership in different communities is an important way of defining ourselves. (Arnold 2005.) According to Allan (1989) not only are friendships and social interaction in themselves important elements in building a healthy identity, but also that a tightly-knit social group allows us to break free from our everyday social roles, and thus helps reinforce our personal identity. Role-playing itself is made out of social interaction, and scenarios are often about teamwork, as the players have to work together in order to maintain a safe shared fictional environment (Bowman 2010).

According amongst others to Fine (1983) and Müller (2011), the role-playing community can be seen as a subculture. Role-players often share similar interests such as certain forms of pop culture (Mackay 2001), which combines with participation in a fairly marginal hobby activity, the use of specialized jargon and humour drawn from a shared cultural context to further strengthen feelings of belonging and community (Leppälahti 2002). Lehigh notes that role-playing games create a social space of their own. In this space there arise new social groups whose primary frame of reference is that of the game world as opposed to the outside world. In this environment people who find it hard to deal with everyday mainstream culture may experience feelings of accomplishment and liberation (Lehigh 2005).

Arnold specifically notes the importance of rituals such as funerals and graduations in providing and strengthening feelings of community and lessening the fear of solitariness (Arnold 2005). The similarities between role-playing and ritual activity have been brought up by many authors (e.g. Bowman 2010, Harviainen & Lieberoth in press, Lehigh 2005, Mackay 2001), and this includes the communities forming around both. Like in sacred rituals, in play the rules of everyday life cease to exist or are cast aside, and actions receive a new meaning from the context of the situation (Huizinga 1984). New interpretations for familiar things and objects are accepted by the participants (Harviainen & Lieberoth in press) and similarly social roles are rearranged regardless of the participants' everyday

roles (Bowman 2010). For example a heterosexual player can play a homosexual character without it being seen as significant in regard to their everyday self (Lehrich 2005).

3. METHOD

The respondents were Finnish role-players, and were mostly assembled using the so-called snowball method. The invitational message containing the URL for the questionnaire was passed to the researcher's social network of players, who in turn forwarded it to their own contacts. Additionally the invitational message was circulated on the mailing lists of various role-playing associations. Due to the need for fairly advanced self-assessment in the questionnaire, the minimum age limit was set at 16 years. The final count of respondents was 16, with 20 different role-playing clubs and societies represented.

It must be observed that the underlying theory poses significant challenges for the researcher. Arnold herself (2005) notes the difficulty of measuring empathic intelligence as a whole. Because of this, the decision was made to construct a survey measuring the respondents' self-assessment of various elements of the theory. While various tested instruments exist for the measurement of individual elements such as empathy, time and resource constraints made their use in the study counterproductive. Just as Arnold with her theory, the author views role-playing as a very complex phenomenon consisting of a multitude of social and mental processes both conscious and unconscious. To focus on only one key aspect was a valid option, but was not the one adopted in this study.

The survey of 71 questions was built around key concepts and themes found in Arnold's theory. These were *community, knowledge and learning, creativity, emotions, empathy and the player character and self-perception*. A cluster of questions was associated with each theme. Additionally the survey collected quantifiable background information on age, sex and hobby experience and provided the respondents with a possibility to describe the positive and negative aspects of role-playing in their own words. Most survey questions were either binary (yes/no) questions, or utilized a five-step Likert scale (two degrees of both disagreement/scarcity and agreement/abundance, one neutral option), suitably worded according to the question at hand. What follows is

an overview of the different themed groups of questions. The survey in its entirety (translated into English) and the data itself are available on request. When appropriate, Cronbach's alpha has been reported.

Group 1: Background consisted of eight questions regarding background variables such as age, sex and education.

Group 2: Role-player identity consisted of five themed questions ($\alpha=.77$) examining the role that role-playing played in the respondent's life.

Group 3: The role-playing community consisted of nine themed questions ($\alpha=.75$) examining the respondent's relationships to other role-players. Cronbach's alpha is for the first six questions, as the three last ones are incompatible due to wording and scale difference.

Group 4: Knowledge and learning effects consisted of seven themed questions ($\alpha=.86$) regarding the respondent's information gathering for role-playing purposes, as well as self-perceived effects on learning.

Group 5: Creativity effects consisted of six themed questions ($\alpha=.70$) regarding art in a role-playing context and vice versa. Due to its nature as a question measuring attitude, question 5.4 was not included when calculating the alpha.

Group 6: Emotional experiences consisted of eight themed questions ($\alpha=.89$) focusing on experiencing strong emotions in role-playing games and processing them.

Group 7: The character and the player consisted of 16 themed questions examining the types of characters the player had played, as well as themes of social roles and empathy. Three of the questions (7.10-7.12) make up an informal subsection in which Cronbach's alpha was .75.

Group 8: Me and others consisted of 10 themed questions ($\alpha=.76$) prompting the respondent to compare themselves to an imaginary non-role-playing contemporary regarding aspects such as creativity and imagination. This section was also contrasted with a control group of 106 non-role-players.

Group 9: Final questions consisted of three open questions regarding the respondent's views on the positive and negative impact of role-playing games on their life as well as the questionnaire itself.

The obtained data was analyzed with the SPSS statistics software, following the advice in several different method guides (Cohen 1988, Gay, Mills & Airasian 2006, Karma & Komulainen 2002). When possible, missing answers were replaced with averages. The effects of gender and differences between the experimental group and the control group were studied using Student's t-test or Pearson's χ^2 -test depending on the question. The effects of age and hobby experience were examined using one-way ANOVA as well as Fisher's LSD-test.

Several method guides (Fowler 1995, Gay, Mills & Airasian 2006, Karma & Komulainen 2002) were utilised in the creation of the survey, and the questions were both submitted to an informal expert- and peer-review at the University of Helsinki Department of Teacher Education. The expert review was provided by Professor Arto Kallioniemi, who also supervised the study. It was also subjected to a test group of five (two non-role-players and three role-players) prior to deployment. Despite this process, several mistakes, such as ambiguous wording on some questions, made their way into the questionnaire. On subsequent informal expert review at the Department of Teacher Education the mistakes were however not considered significant enough to suggest data invalidation. When discussing the results of such questions, the possible ramifications of the researcher's mistakes are taken into account. The fact that the whole of the study was neither validated nor counterbalanced must also be observed when considering its validity and reliability.

4. RESULTS

This chapter showcases what are viewed as the most important results of the study. While some comments and speculation is expressed, most discussion is left to the next chapter. The main findings in each of the nine sections of the survey are reported. In the case of a background variable causing significant change in the results, it is specifically mentioned. The form of the question is either specifically mentioned or apparent from the reporting.

When correlation is discussed in the results, Pearson's correlation is used. It can receive a value between -1 and 1. Here 1 means a perfect positive relationship, -1 a perfect negative relationship and 0 a complete lack of relationship (Karma &

Komulainen 2002). According to Cohen (1988) a correlation between $\pm .10$ and $\pm .29$ indicates a weak dependence, a correlation between $\pm .30$ and $\pm .49$ a medium one and a correlation of over $\pm .50$ a strong one.

Statistical significance as well as correlation strength is indicated in the text by asterisks:

$p < 0,001 = ***$ (statistically very significant)

$p < 0,01 = **$ (statistically significant)

$p < 0,05 = *$ (statistically nearly significant)

Only statistically significant results at the above levels have been reported.

The respondent group (N=161) was fairly balanced in terms of gender, with 59% (N=95) being male and 41% (N=66) being female. Gender differences were significant in various questions, and this is examined in detail later.

Most of the respondents were in their twenties or thirties, with over two thirds (N=127, 78,8%) of the respondents over 25 years old. Most (N=109, 67,7%) had been playing role-playing games for 11 years or more, and had started playing role-playing games before their 15th year (N=110, 69,2%). The level of education was highly biased, with over 75% of the respondents having at least a Bachelor's level degree. This bias was taken into account in reliability studies.

The respondents played role-playing games with various activity, usually a few times per month. A significant amount, 45,3%, played more seldom than once a month. Gender played a significant part ($\chi^2=19,4^{**}$, $df=4$, Cramer's $V=.35$) in allotting roles in the player group: approximately three quarters of the women were always or usually players, whereas this was true of approximately half the men.

Regardless of age or gender, the majority (67,7%) of respondents reported that role-playing games were an important or somewhat important part of their personality ($m=3,7$, $s=1,1$). The role-playing hobby had a somewhat or very important role in the lives of over 80% of the respondents ($m=4,2$, $s=1,0$). Role-players preferred the company of other role-players compared to their other social groups ($m=3,3$, $s=1,0$) and the majority reported that most of their friends were role-players ($m=3,6$, $s=1,2$).

4.1 The Role-playing Community

Over 70% of the respondents viewed themselves as belonging to some extent to an undefined

community or subculture of role-players ($m=3,7$, $s=1,1$). A vast majority of over 87% reported having found significant relationships (no division between romantic and platonic was made) through the hobby ($m=4,4$, $s=0,9$). There was a statistically significant difference between genders ($t=-3,2^{**}$, $df=157$), with women ($m=4,7$, $s=0,6$) reporting having found such relationships markedly more than men ($m=4,3$, $s=1,0$).

Regardless of age or gender, the majority of respondents reported that role-playing games were an important or somewhat important part of their personality.

Of all respondents, approximately 35% completely agreed with the statement that relationships found through role-playing made up a significant part of their social life. If those that somewhat agreed with the statement are included, the percentage rises to approximately 70% ($m=3,8$, $s=1,2$). There was a strong positive correlation ($.64^{**}$) between finding new relationships and the importance of role-playing friends in one's social life.

The role-playing hobby had to some extent provided significant social experiences to 89,4% of all respondents ($m=4,4$, $s=0,8$) and 82,6% viewed the hobby as having had a positive impact on their social development ($m=4,3$, $s=0,8$). Hobby experience played a role, with those respondents that had played for less than seven years reporting less meaningful experiences ($m=4,0$ compared to other groups all with $m>4,5$, $p<0,05$) than other groups. The least experienced group ($m=3,9$, $s=1,0$) reported less positive development than the most experienced one ($m=4,4$, $s=0,8$), with the difference of means significant at the $p<0,05$ level. Regardless of background variables, a majority of respondents reported at least some development in their group skills through the hobby ($m=4,3$, $s=0,8$).

There was a significant positive correlation ($.49^{**}$) between social development and significant experiences. Social development also correlated positively with the importance of role-playing in one's life ($.47^{**}$), finding significant relationships ($.49^{**}$) and improvement of group skills ($.41^{**}$).

All respondents reported meeting their gaming acquaintances outside of gaming situations as well ($m=4,0$, $s=0,9$), with over 73% meeting them often or very often. When meeting these gamers outside of gaming situations, the significance of the role-

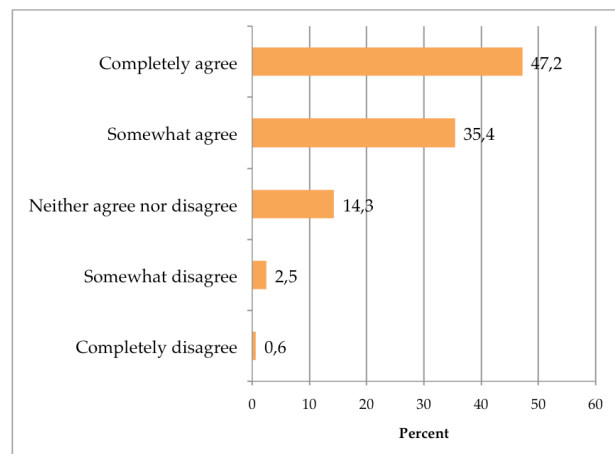


Figure 1. "Role-playing has had a positive impact on my social development". (N=161)

playing hobby in the relationship decreased. Although all respondents talked about role-playing games when meeting gaming friends ($m=3,3$, $s=0,7$), a majority of two-thirds reported talking about them only seldom or occasionally. There was a positive correlation ($.42^{**}$) between this and the importance of the hobby in one's life: the more important the hobby was viewed as, the more it was discussed.

Despite the reported importance of the social aspect of the hobby, game content was still seen as relatively more important than the social gaming situation. Even though the majority (43,5%) of respondents reported these two as being equally important in a role-playing session, there were significant differences in the rest of the spread. Those that viewed game content as being more important than the social situation made up 42,2% of all respondents, while only 14,3% viewed it the other way around. Age had an effect here ($\chi^2=20,7^{**}$, $df=8$, Cramer's $V=.25$), as approximately 62% of 30+ respondents reported game content as more important than the social situation.

Despite the reported importance of the social aspect of the hobby, game content was still seen as relatively more important than the social gaming situation.

4.2 Learning Effects

The themes and events of role-playing scenarios were not contained in the gaming situation itself. Instead, the vast majority (78,3%) of respondents

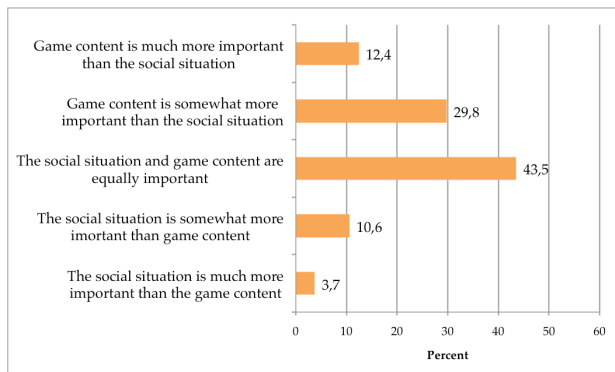


Figure 2. The importance of game content and the social situation in a role-playing game session. (N=161)

reported repeatedly thinking about them outside the games themselves at least occasionally ($m=3,6$, $s=0,9$), with over half of all respondents doing so often. There was a positive correlation ($.48^{**}$) with discussing role-playing games outside gaming situations.

Over 65% of respondents reported having learned new, useful things from role-playing games ($m=3,8$, $s=0,9$) and the majority reported having often or very often sought information on various subjects for game purposes without an explicit request ($m=3,7$, $s=1,1$). Information was also sought inspired by, but independent of game purposes, but to a lesser extent ($m=3,2$, $s=1,0$).

More than half of the respondents estimated that role-playing had improved their problem solving skills ($m=3,5$, $s=1,0$). There was a statistically significant ($t=3,3^{**}$, $df=159$) difference between genders, with men ($m=3,8$, $s=1,0$) reporting it happening more often than women ($m=3,2$, $s=0,9$). Hobby experience was also a significant factor ($F=3,9^{**}$, $df=157$), with those respondents with over 15 years of gaming experience ($m=3,9$, $s=0,9$) reporting improvement more often than other groups with less experience.

4.3 Creativity and Emotional Effects

Regardless of background variables, 57,1% of respondents agreed to some extent with the view that role-playing games are art ($m=3,6$, $s=1,1$). The question included an input box that allowed the respondents to expand on their answer. The following quotes are some of the 79 comments.

Role-playing games are a medium in which it is possible to create art, but they're inherently no more art than any other

creative communal activity. In other words it's a question of definitions. If we're talking about the traditions of art, I might not categorically view role-playing games as art. **Woman, over 30.**

Role-playing and live action role-playing games are a multi-leveled form of culture, combining literary, visual and emotional experience. Role-playing games are the art of experience. **Woman, 25-30.**

I hold the idea that art is performing and experiential – role-playing is participatory rather than performing. Performing art provides outside viewers with a lot, whereas participatory activity is quite bland without actual participation. Role-playing provides experiences, but only if the player partakes in creating those experiences – that's why I wouldn't include it in the performing arts. **Man, over 30.**

Yes, experiences and thoughts are created in role-playing games. But I don't think that the primary intention is to get the people (players?) to think about those things in a new way, but rather to function as entertainment. Even though role-playing games are a way of self-expression for many. **Man, under 25.**

Role-playing and live action role-playing games are a multi-leveled form of culture, combining literary, visual and emotional experience. Role-playing games are the art of experience. (Woman, 25-30)

Over 74% of all respondents reported having experiences similar to those experienced with art when role-playing ($N=158$, $m=4,1$, $s=1,0$), with over 41% reported this happening very often. More than 70% viewed role-playing games as having improved their imagination ($m=3,9$, $s=1,0$). A gender difference was present ($t=2,9^{**}$, $df=123$), with men ($m=4,1$, $s=0,9$) reporting improvement

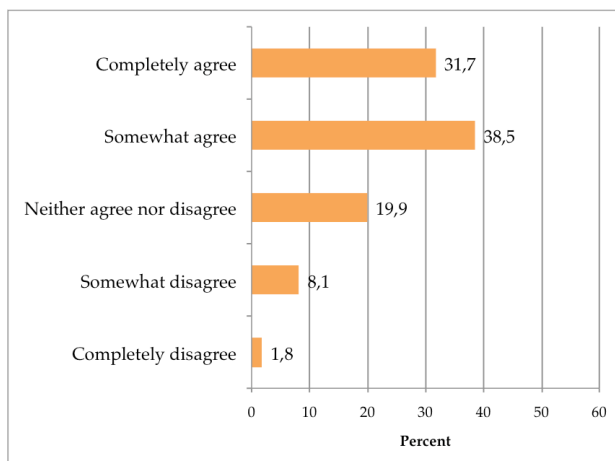


Figure 3. "Role-playing has improved my imagination" (N=161).

more frequently than women ($m=3,6$, $s=1,1$). The question about creativity development yielded similar results, with over 73% of respondents reporting improved creativity ($m=3,9$, $s=1,0$). A similar gender difference was also present, albeit not as significant ($t=2,4^*$, $df=117$). There was a very strong positive correlation ($.79^{**}$) between imagination and creativity development.

In-game events had provided the respondents more frequently with positive ($m=3,6$, $s=0,8$) than negative ($m=3,1$, $s=1,0$) emotional experiences. There was a strong ($.50^{**}$) positive correlation between the two, indicating that the same respondents were inclined to have (or not have) positive and negative emotions from in-game events. Women ($m=3,4$, $s=1,0$) were significantly ($t=-3,4^{**}$, $df=159$) more prone to experiencing negative emotions than men ($m=2,9$, $s=0,9$). No such difference was apparent concerning positive emotions. A similar gender difference, however, was discovered in the frequency with which the emotional experiences caused by in-game events were thought about after games ($m=2,6$, $s=0,9$). This was much more typical for women ($m=2,9$, $s=0,8$) than for men ($m=2,4$, $s=1,0$), with the difference being statistically very significant ($t=-3,8^{***}$, $df=155$). While 16,8% of male respondents ($m=2,4$, $s=1,0$) reported never mentally re-visiting emotional experiences caused by in-game events, every female respondent ($m=2,9$, $s=0,8$) reported doing it at least occasionally. It bears noting that such behaviour was fairly infrequent overall, with 75,2% of all respondents reporting it happening only occasionally or seldom. Introspection brought on

by role-playing was even more rare ($m=2,4$, $s=1,0$), with only 11% of all respondents stating it happening often or very often. Again, women ($m=2,7$, $s=1,0$) reported such introspection more often than men ($m=2,2$, $s=0,9$), with the difference being statistically significant ($t=-2,6^{**}$, $df=159$).

While the majority of respondents replied that role-playing games allowed them to experience negative emotions in a safe environment ($m=3,3$, $s=1,3$), less than half (46%) felt that the games provided a way of dealing with such emotions ($m=3,1$, $s=1,3$). There was a strong ($.76^{**}$) positive correlation present, suggesting that those that viewed the game situation as a safe environment also felt that it helped them process the emotions brought on by games. While lesser than in previous questions, the gender difference was again present ($t=-2,6^*$, $df=159$). Women ($m=3,7$, $s=1,3$) viewed role-playing games as a safe environment for negative emotions more frequently than men ($m=3,2$, $s=1,2$).

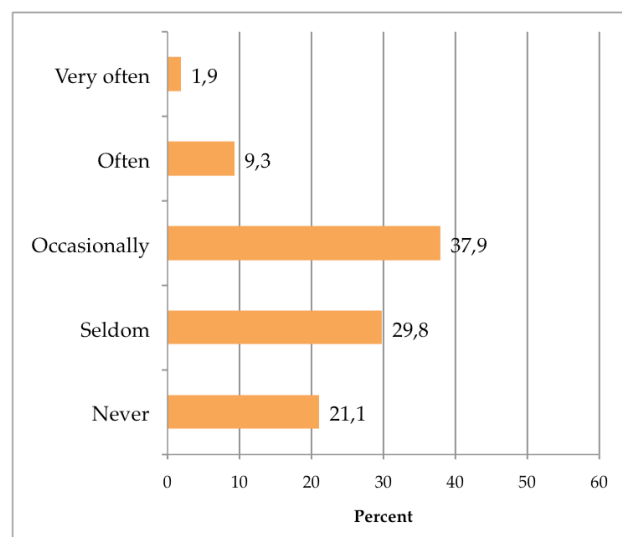


Figure 4. "An in-game event has created an emotional experience intense enough to cause introspection" (N=161).

Exactly 25% of all respondents reported having often or very often been able to examine their own emotional life through role-playing ($m=2,8$, $s=1,1$), while 37,8% said this had happened only seldom or very seldom. As with most previous survey questions dealing with emotional experiences, this was much more common for women ($m=3,2$, $s=1,0$) than for men ($m=2,6$, $s=1,1$). The difference was statistically very significant ($t=-3,6^{***}$, $df=154$). Cross-referencing the correlations between

questions dealing with emotional experiences showed most of them being positively connected.

4.4 The Players and their Characters

The respondents reported having played a wide variety of characters. These are detailed in table 1.

Have played a...	Yes %	No %
Character that bears no physical resemblance to player	91,3	8,7
Character that is of opposite sex to the player	76,4	23,6
Character whose personality is repulsive to the player	78,3	21,7
Character whose personality the player aspires to	82	18
Character that bears no mental resemblance to player	80,7	19,3
Character that bears no social resemblance to player	85,7	14,3
Character whose world view is significantly different from the player's	91,9	8,1
Character that bears no moral resemblance to player	86,3	13,7

Table 1. Character and player differences (N=161).

Gender affected the answers only in the first question, with nearly all men (96,8%) having played a physically very different character compared to 83,3% of the women. The difference is statistically significant ($\chi^2=9,0^{**}$, $df=1$, Cramer's $V=.24$). Hobby experience was a significant ($\chi^2=13,1^{**}$, $df=3$, Cramer's $V=.29$) factor concerning playing repulsive characters. Whereas only 55,6% of players with less than seven years of role-playing experience had played such characters, 90,8% of players with more than 15 years of experience had done so. A clear minority of 26,7% usually played characters closely resembling themselves in terms of personality ($m=2,7$, $s=1,1$).

This result was further supported by over 88% of the respondents viewing role-playing games as a good platform for exploring different social roles ($m=4,3$, $s=0,9$) and by over 84% stating the same about personality traits ($m=4,2$, $s=1,0$).

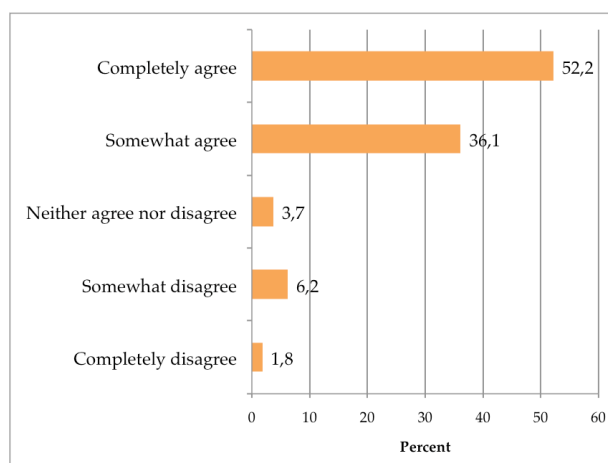


Figure 5. "It is easy to experiment with different social roles in role-playing games" (N=161).

Self-perceived development of empathy skills to some extent was reported by over half the respondents ($m=3,6$, $s=1,1$), and it was slightly more common with men than with women. There were several significant correlations with the perceived development of empathy skills. The most important were with the development of group skills (.48**), art-like experiences (.44**) and the processing of negative emotions through role-playing (.45**). There was a medium negative correlation (-.37**) between empathy development and playing characters similar to oneself. The more the players reported playing characters differing from themselves, the more they reported a feeling of having developed their empathy skills. A little over a third of respondents reported often or very often comparing their own actions with those of their characters ($m=3,2$, $s=0,9$).

4.5 Compared to Others

The eighth section of the study consisted of a series of self-assessment questions, in which the respondents compared themselves to an imaginary non-role-playing contemporary on a five-step Likert scale. The respondents were asked to rate themselves in the following areas: imagination, interest in the world and its phenomena, social skills, group skills, problem solving skills, empathy, creativity, tendency for introspection, interest in culture and finally spare time reading activity. Explanations for the terms and concepts were included where deemed necessary, and the

wording on the Likert scale altered according to each question.

To alleviate some of the problems inherent in self-assessment questionnaires (Dunning, Heath & Suls 2004, Sundström 2005) a control group (N=119) was used. The control group was drawn from four different student choirs in the University of Helsinki and the survey was conducted in a similar way to the experimental group. The control group members were made aware of participating in a study examining the self-perception of different hobby groups, and they were allowed to select from a variety of hobbies they actively participated in. One of these options was role-playing, thus allowing the screening and removal of active role-players (N=13) from the sample, resulting in a total of 106 valid respondents in the control group.

There were considerable differences in background variables between the two groups. The most significant one was gender: the experimental group consisted of 59% males and 41% females, whereas in the control group 21% were male and 79% female. The control group had a larger percentage of under 25 year olds than the experimental group (38,7% compared to 21,1%) and correspondingly a smaller amount of over 30 year olds (16,0% compared to 33,5%). In both groups a majority of exactly 45,3% fell into the 25-30 age category. Due to the control group consisting of student choir members, 90,6% of the respondents possessed at least a Bachelor's level degree, compared to 75,8% in the experimental group.

In the experimental group age and hobby experience accounted for some minor differences ($p < .05^*$) in the respondents regarding interest in the world. Role-players in the 25-30 age category ($m=4,0$, $s=0,8$) rated themselves higher than those under 25 years old ($m=3,6$, $s=0,7$). The same held true for those respondents with over 15 years of gaming experience ($m=4,0$, $s=0,8$) and those with less than 7 ($m=3,6$, $s=0,6$). The age effect was not found in the control group.

Level of education did not significantly affect responses in the experimental group. On the whole the same held true in the control group, although Fisher's LSD test revealed those respondents with at least a Master's degree ($m=4,0$, $s=0,8$) viewing themselves as more introspective ($p=.03^*$) than those with a Bachelor level degree ($m=3,6$, $s=0,9$).

No statistically significant gender difference could be discerned in the experimental group, the only

notable difference being females ($m=4,1$, $s=0,8$) viewing themselves as more creative ($t=-2,3^*$, $df=159$) than males ($m=3,8$, $s=0,7$). In the control group there were more significant gender differences with males viewing themselves as more interested in the world ($t=2,9^{**}$, $df=104$) as well as more skilled in problem solving ($t=2,3^*$, $df=104$).

As a general rule respondents in both groups mostly rated themselves average or above average in all the areas. Role-players ($m=4,3$, $s=0,7$) viewed themselves as having a much richer imagination ($t=-4,7^{***}$, $df=265$) than non-role-players ($m=3,9$, $s=0,8$). Spare time reading activity was much higher ($t=-5,5^{***}$, $df=265$) in role-players ($m=3,8$, $s=1,0$) than in the control group ($m=3,2$, $s=1,0$). There was a weak ($.25^{**}$) positive correlation between imagination and reading activity.

Role-players viewed themselves as having a much richer imagination than non-role-players.

A third statistically significant difference was found in the respondents' views of their social skills. Non-role-players ($m=3,6$, $s=0,8$) had a higher view of their social skills ($t=2,8^{**}$, $df=265$) than role-players ($m=3,3$, $s=0,9$).

4.6 In Their Own Words

The final section of the study consisted of two open questions, one asking the respondent to assess the positive impact of the role-playing hobby on their own life and one the negative. The first question garnered 121 answers, and the second one 80. Below are listed the most commonly mentioned aspects along with some actual quotes.

Positive impacts

By far the most common positive aspect mentioned was the effect of the hobby on interpersonal relations, such as new friendships and wider social circles. This was mentioned in 77 different answers.

When I met my first role-playing contemporaries at the age of 16, I felt as if I'd come home. The same people are still active in my life. **Woman, 25-30.**

If I consider the fact that every significant relationship since preliminary school is connected to the role-playing hobby, including the one with my household partner, I'd say the effect is immeasurable. **Woman, over 30.**

Improvement of social skills was explicitly mentioned 23 times. Four respondents specifically reported overcoming social difficulties.

Meeting nice people. Safely experimenting with social roles. Larping increased my courage. **Woman, under 25.**

18 respondents reported development of empathy, the skill of taking another's point of view or assuming another role.

I've taught myself to relate to other people by attempting to see life from different points of view. I think it's because of this that I'm not completely obnoxious today. **Man, over 30.**

A lot. My skill in examining things from different points of view has increased, as has the ability to consciously assume a certain status or role and through that capabilities in affecting other people. For example overcoming feelings of insecurity in a job interview by distancing oneself from one's own self and insecurities. **Man, over 30.**

Meeting nice people. Safely experimenting with social roles. Larping increased my courage.
(Woman, under 25).

Identity-building, mental development and increased self-awareness were mentioned 17 times.

I think I'd be stuck in many ways with myself, if I hadn't found the right channel to unleash all that inner energy. The role-playing circles and other like-minded people helped overcome wounds caused by bullying. Finding one's own place has reinforced the feeling of self as well as the feeling of being good at something. **Woman, 25-30.**

The effects of role-playing on imagination, creativity and self-expression were specified in 13 answers.

Role-playing games have offered a suitable and voluntary arena for different creative projects, which would have otherwise remained hidden. This has had a big positive effect on me as a person. It has been much better to play and develop role-

playing games than it would've been to write for years for the drawer or take part in more institutionalized cultural activities (amateur theatre etc.) **Man, 25-30.**

There were various other themes mentioned, such as escape from reality, improved improvisational skills, relaxation and having fun, improvement of language skills and general knowledge.

Negative impacts

The most commonly mentioned negative effect was time consumption, which was brought up 29 times.

It just eats up time something awful. I've often skipped school work to write role-playing games. **Man, 25-30.**

I could play the Devil's advocate and say that I spend too much time with them compared to my other social activities / maybe everything else. **Man, under 25.**

The second most common negative aspect was stigmatization and the need to explain the hobby to non-gamers. This was mentioned 18 times.

Not all people can understand the concept of role-playing, but instead joke about going out wearing a cape made out of a sheet. I no longer bring up the hobby in my first conversations. **Man, under 25.**

Bullying had already started before gaming, but as the (live action role-playing) hobby became public knowledge, it just added fuel to the flames. **Man, over 30.**

The close-knit, elitist nature of the role-playing community was criticized in 16 answers.

The communality and "scene" qualities in role-playing include phenomena which I consider negative on some level. For example in role-playing games the escapist way of dealing with problems isn't about the fictional world but rather the self-regulated community separate from "mundanes" [non-role-players], where people escape the problems they don't have the capacity deal with in a more mundane community. Because of this role-playing games often become unnecessarily important and serious: they're laden with social investment which it might be wiser to use in more everyday circles. **Man, 25-30.**

Role-playing is a very inwards turned hobby – what I mean is that they don't promote looking outwards. I think you can see in many role-players a tendency for focusing intensely only on one's own role-playing culture. **Man, over 30.**

Seven of the respondents mentioned the blurring or avoidance of reality or the bleeding of negative feelings from games into everyday life.

In my most intensive role-playing periods I've at times been so immersed in the lives of characters and the game world that it has begun to impede so-called normal life (studies, relationships etc.). At times it has even been difficult to make the distinction between the self and the characters played – in this way it can be thought that role-playing has even been an impairment in my younger years – when I was still looking for myself and my identity.

Woman, 25-30.

The respondents also brought up loss of money, inappropriate behaviour by other players as well as the strain put on friendships by games.

5. DISCUSSION

Several things have to be considered when viewing the results of the study. While an online survey is a quick method of gathering a large sample, it may also result in quick, non-thoughtful answers by the respondent. Possible misunderstandings are also very difficult to control, as there is no way for the respondent to ask for definitions or more information, nor for the researcher to make further questions. The survey included several large concepts such as empathy, problem solving and group skills, and while explanations for the terms were provided, there still exists a variety of interpretations.

The method of sampling provides another problem, that of generalization. While the snowball method guaranteed the participation of plenty of active, long-time hobbyists certainly capable of analyzing their relationship to role-playing games, it also severely limits the results in terms of generalization. The lack of generalizability does not, however, preclude the study from providing insight into the phenomenon researched or from providing ground for future research.

A third risk lies with the respondents themselves. The researcher never knows whether the answers given are honest or biased, and it is reasonable to assume that some respondents may second-guess the reasons of the study and provide socially desirable, “correct” answers. This is not seen as a significant problem, however, as the study is more an exploratory survey of attitudes and views than an attempt to for example build an accurate, generalized image of a typical role-player. For the same reason suggesting direct causality in the results has been avoided in favour of correlation scores and speculation.

Both theory and the results of the survey suggest a connection between the role-playing hobby and empathic intelligence as defined by Arnold. According to the results, there is a significant overlap of the actions and communities described in Arnold's theory and those self-perceived by the respondents. Narratives, empathy, engagement and both inter- and intra-subjective activity came up as integral parts of role-playing, with respondents widely reporting increased group skills and positive social and mental development in line with what Arnold suggests empathically intelligent conduct should produce. These findings combined with previous research (Bowman 2010, Karwowski & Koszynski 2008, Piippo 2010, Simkins & Steinkuehler 2008) suggest that role-playing games provide tools and a suitable environment for developing positive interaction and group skills – both important elements of empathic intelligence.

Self-perceived empathy skill development was apparent in the results, with over half of all respondents viewing role-playing as directly having increased their empathy skills in some quantity. The positive connection between role-play and empathy development has been observed in previous research (Poorman 2002), supporting this result. Imagination and creativity that Arnold lists as being key factors in empathy were both perceived having developed via role-playing by over 70% of the respondents. The respondent group had typically played characters significantly different from their everyday selves in terms of personality, world view, morals or gender. Over a half of the respondents avoided playing characters similar to themselves. Instead, the games served as a platform for exploring social roles and personality traits. This is very much in line with Simkins & Steinkuehler (2008, 352) who state that

RPGs [role-playing games], even violent games with dark and transgressive themes such as vampires and assassins, provide us simulated social spaces in which we can play through various ways of being in the world. It may very well be that playing through such roles, including those we would never consider taking up in the real world, has the potential not only to foster greater empathy, tolerance, and understanding for others but to help us critically reflect on who we want to be for others and how we have both power and responsibility in all of the roles we inhabit in our lives.

In-game events were a common source of both positive and negative intense emotions, further suggesting the importance of the games to the players. It is possible to deduct from these answers that role-playing games provide a space for what Arnold mentions as perhaps the most important aspect of narratives and the imagination: a deeper understanding of the world via crossing the borders of everyday life. However, a significant difference in emotional investment in games exists. Some respondents were consistently more often emotionally touched by games than others, with this being especially prevalent in women.

The results also show a perceived connection between role-playing and art, suggesting legitimization for utilizing the tools of art studies and art philosophy in the study of role-playing games, as well as viewing role-playing as at least something similar to art in relation to Arnold's theory especially regarding emotional experiences. From this it is suggested that the potential for reflection that Arnold sees in art is also present in role-playing games. Emotional experiences elicited by role-playing were at least occasionally mentally re-visited to by more than half of all subjects, and over 60% reported being at least occasionally able to examine their own emotions through role-playing. Albeit in various quantities, meaningful experiences as described by Arnold and Harding (2007) seem to appear in role-playing games. This result finds support from Henriksen (2006) who explicitly views role-playing games as having potential as a reflectional tool. There is an interesting connection here with the research carried out by Kross, Ayduk & Mischel (2005), in which it was found that a self-distanced perspective was key to processing and coolly reflecting on negative emotions, whereas an

immersed self-perspective increased the risk of enhancing distress. According to the results of the current study, reflection does not automatically or inevitably follow role-playing, however, and that true introspection brought on by games seems to be a fairly rare occurrence.

Some respondents were consistently more often emotionally touched by games than others, with this being especially prevalent in women.

The study shows communality to be an important part of the role-playing hobby. Similar results have been found in previous studies (e.g. Fine 1983, Leppälahti 2002, Piippo 2010). The respondents identified themselves as role-players quite readily, and the role-playing community was brought up in the open questions repeatedly, in both positive and negative comments. This suggests that the role-playing community as described by the respondents matches Arnold's concept of a community providing life with meaning and eliciting both rational and emotional attachment and commitment. The negative comments speak of such commitment as well. The negative aspects of the role-playing community has been previously noted for example by Fine (1983), Lehrich (2005) and Kim (2010), who report findings similar to those voiced by the respondents in the current study.

The results of the study combined with existing theories suggest a potentially strong connection between empathy development and the role-playing hobby. The elements of empathy that Arnold lists – reflection, community, imagination and role-taking – are shown to be present, and the position is supported by the open answers explicitly mentioning empathy and imagination development. Based on this study role-playing games have the potential to further the empathy development of practitioners. Just as with the potential for reflection, it bears to keep in mind that empathy skills are not a direct result of role-playing, but rather that the hobby seems to provide a rich environment for its healthy and effective development. Again, this corresponds with previous writings and research. Poorman's study (2002) showed empathy development as a result of role-playing, the role-players interviewed by Piippo (2010) brought up empathy development as

the most positive effect of role-playing, and for example Harder (2007) and Pitkänen (2008) have both noted role-playing's potential for teaching empathy and social skills. Simkins & Steinkuehler (2008) state that role-playing games are potentially powerful spaces for practicing and developing skills of critical ethical reasoning, another important element of empathy development. There are of course several difficulties that go with stating a connection between self-perceived empathy development and role-playing. There are various definitions for empathy and previous research is often conflicting (Stepien & Baernstein 2006). This is in addition to the unreliability of self-assessment especially in the case of large abstract concepts (Dunning, Heath & Suls 2004).

The results also suggest that based on existing theory and the self-assessment of active role-players, the role-playing hobby provides a good platform for developing empathic intelligence as described by Roslyn Arnold. Due to the difficulties of measuring empathic intelligence as a whole, the claim is based on finding in both theories and respondent views on role-playing the majority of the qualities seen by Arnold as essential to empathic intelligence and its development. This conclusion is reached despite taking into account criticisms that can be levelled at individual aspects of the study such as survey construction or the validity of self-assessment, although these should be taken into account and addressed when designing and conducting further research.

The study also sheds light on the self-perception of role-players as well as their overall view of the hobby. The hobby's dual aspects of game content and social event both show their importance. The social networks growing around the hobby are seen as a very important part of role-playing, yet in an individual gaming session the stressed importance of game content becomes apparent. This seems to suggest large variations in the way role-playing games are viewed. For one group the games are first and foremost about the content, for a smaller group it is the social event that matters more. For the majority it is a combination of the two. No background variable clearly accounting for the differing preferences was found. One possible explanation and a variable not explored in this study is whether a respondent usually plays tabletop or live action games. The social dynamics in a typical tabletop gaming group of 3-5 players differ significantly from those of a live action game with tens or even hundreds of participants, which

might account at least in part for the preferability of either game content or the game's social function.

The whole of the hobby is viewed in a very positive light. This is supported by the respondents' tendency to view themselves as belonging to a sub-culture or community of role-players, even if almost half the respondents reported playing role-playing games only once per month or less. The positive view extends to the players themselves as well. Contrary to common stereotypes (Curran 2010, Leppälahti 2002) role-players appear to have a very positive self-image, viewing themselves as creative, empathic, and imaginative. This is consistent with Curran's (2010) findings when reviewing past research. There are several problems with self-assessment, though, and its accuracy has been called into question with conflicting results (Dunning, Heath & Suls 2004, Sundström 2005). However, even if role-players do overestimate their social and mental skills, it is in itself an indication of an overall positive self-image, which in turn they largely seem to attribute to their hobby. Whether this positive self-image is realistic is an entirely different question that calls for further research. When examined against the data provided by the control group, significant differences did emerge. Role-players viewed themselves as much more imaginative than their control group peers. They also showed a strong reading hobby. The fairly low correlation between the two suggests that reading a lot does not directly imply a rich imagination.

However, even if role-players do overestimate their social and mental skills, it is in itself an indication of an overall positive self-image, which in turn they largely seem to attribute to their hobby

Positive results of using role-playing as a vehicle of creativity and imagination development exist (Karwowski & Soszynski 2008) and the imagination of role-players calls for further studying. While role-players generally viewed themselves as having normal or better than average social skills, there was a notable difference in the low-end assessments when compared to the control group. Whether this indicates individuals with poor social skills taking up role-playing, non-

existent social skills being developed to a better (if still low) level or the hobby distancing some role-players from everyday social functioning is another question to study. It is apparent, however, that the stereotype of role-players lacking social skills (Bowman 2010, Leppälahti 2002) is not completely fictional.

As a tertiary finding there were notable gender differences, especially in regard to emotional responses brought on by role-playing. Women reported in-game events causing negative emotions more often than men, a result in line with previous research (Simon & Nath 2004) showing women to report negative feelings more frequently than men. Women also reported more frequently dealing with their negative feelings in a safe environment provided by role-playing games. It was also much more common for women to report reflecting on game events and their emotions, and processing the latter through games.

6. CONCLUSION

There is strong indication of role-playing games potentially having a positive effect on the development of both intra- and intersubjective skills, based on empirical research, theory and personal experience. Yet potential does not equal actual development. If there is a wish to use role-playing games as a tool for social, mental or emotional development, it will require careful planning and delicate use of the tool. Role-playing has been used in teaching and different forms of therapy, and its potential in cultivating skills necessary for community building and improving social conduct is obvious.

This study also indicates that role-players take their hobby seriously. Games are often not just games, but also important social events and mental pressure valves. This study is hopefully one among many others working to dissolve the claim of games being “just games” and establish gaming in its many forms as an important form of culture. When role-playing games are viewed in this context, the importance of further research on the role-playing experience and its possible effects on players, both positive and negative (for example Meriläinen 2011, Montola 2010), becomes apparent.

There is clearly an abundance of aspects to role-playing that require much more research – the community, the gender differences, the game

experience and role-players' self image to mention a few. One aim of this study was to serve as a platform and an opening, providing new findings and in turn provoke new questions, which it did despite its shortcomings. As role-playing research becomes more systematic and widespread, more actual research data hopefully enters a field still largely influenced by personal opinions and informed assumptions and eventually a solid research tradition develops.

Games are often not just games, but also important social events and mental pressure valves.

7. ACKNOWLEDGEMENTS

I would like to thank Drs. Arto Kallioniemi and Erkki Komulainen for their assistance during the research process, as well as my thesis advisor Dr. Markku Hannula.

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