

# Stereotypes and Individual Differences in Role-playing Games

**Popular Abstract** - Because of the endurance of stereotypes about role-playing gamers, much research has been carried out which provides evidence to contradict the stereotype's prevailing misconceptions. This paper aims to investigate this existing research into the individual differences in those who play role-playing games and provide a comprehensive review of research in the areas of demographics, interests, personality and identity as they pertain to gamers. The goal will be to investigate the extent to which the common perception of game-players stands up under investigation. The paper will also attempt to refute some of the more extreme and outrageous claims which have been made in relation to role-playing games – particularly those which involve crime, violence, murders, suicides and Satanism. The article will also examine child's play and role-playing games in order to illustrate the importance of this style of imaginary play for identity development for both children and adults.

The stereotypical image of role-playing gamers depicts them as anti-social male teenagers who are largely more interested in technology than in their own personal appearance, believing that they are highly intelligent and imaginative, passionate about topics which are uninteresting to their peers, and consequently persecuted by some of these peers. Through an examination of the research carried out in this area, the emerging image of a gamer is in fact that of an individual who does not necessarily fit into the stereotypical demographic of being a young male, and who is actively involved in developing his or her own personality and identity through participation in the games and also within the social networks that are often framed by these games.

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## ABSTRACT

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## 1. INTRODUCTION

A Role-Playing Game (RPG) is a game in which the participants assume a character role and determine that character's actions, within a specific scenario, with agreed rules, played individually or in a group, with or without a mediator, and where the outcome is without definite limits as of duration or amount.

In 1974, the genre of Role-Playing Games came into being with the publication of the "world's first role-playing game" (Mackay 2001) – Gyax & Arneson's *Dungeons & Dragons* (1974). The game emerged from a background of war-games and fantasy-based fiction such as the works of J.R.R. Tolkien (King & Borland 2003; Mackay 2001; Schick 1991). The popularity of the genre is attested by the fact that this earliest example is currently (in 2010) in a fourth edition.

In the intervening years, role-playing games have expanded into a range of different formats, advancing onto computers as both purely text based programs (MUDs) and Massively Multiplayer Online Role-Playing Games (MMORPGs) with intricately designed Graphical User Interfaces, and into other forms such as games played through the post (play-by-mail), and Live Action Role-Playing (LARP), although many people still play the original table-top format role-playing Game (Mackay 2001). In fact, one study found that the table-top format still outranked its more digital descendants in terms of enjoyment (Tychsen et al. 2007).

The purpose of RPGs has expanded, as their format has evolved, and apart from their primary functions of enjoyment and entertainment, role-playing games are often used for training and educational purposes, to develop skills and strategies, or to allow participants to cooperate with others on tasks as part of a team (Tychsen et al. 2007; Law.Com 2009; White 2007). As expected, while their formats and purposes have expanded,

so have their user-base, and role-playing games are presently played by millions of people worldwide every day: *Blizzard Entertainment* (2008) claim that an estimated 11 million plus individuals are involved in playing the most popular of the online version of role-playing games, *World of Warcraft*, and this is merely one of the many different RPGs available.

As such, the production and sale of computer games is a multi-billion dollar industry, with the ESA (2009) providing figures for computer and video game software sales as reaching \$11.7 billion during 2008. It is thought that, on average, 9 games were purchased every second of every day in America during 2008, a quadrupling of sales since 1996 (ESA 2009). Within these sales, the genre of 'role-playing games' or RPGs has been found to account for 5.4% of all video games sales and 19.6% of all computer games sales in the USA.

Similarly, Internet use has increased exponentially in recent times. By the year 2002, approximately 600 million people had access to the internet (Manasian 2003), and today this number has grown to over 1.7 billion internet users worldwide (Internet Usage Statistics 2009). Owing to the advent of widespread internet access and game availability, it is no surprise that online role-playing games have expanded further than ever before.

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Despite the undeniable popularity of the role-playing game, no agreement has yet been reached on a formal definition of the term, perhaps owing to the wide variety of different types of RPG and the many formats and platforms in which they exist. This is not to say that definitions have not been proposed: numerous definitions of role-playing games have been put forward (Hitchens & Drachen 2009), yet no consensus has yet been reached in the academic community.

In the quest for a definition, role-playing gaming has often been seen as being based on a largely qualitative process (likened to a social process), rather than a quantitative, measurable, formal game system (Montola 2008). This, however, has

made the game-play quite difficult to investigate, and the difference has been described by Montola as carrying out a straightforward analysis of the rules laid out for a formal game system such as Poker, and then including the almost infinite number of extra possibilities that are added with the influence of the social aspect of the game such as bluffing. Many researchers agree that a role-playing game must involve rules of some type, either spoken or unspoken; however there are still some who disagree with this, asserting that RPGs have no *static* rules (Juul 2003).

One research group's definition describes RPGs as being "created in the interaction between players or between player(s) and games master(s) within a specified diegetic framework" (Hakkarainen, & Stenros 2002). Diegesis is the telling of a story through narration, as opposed to a story being shown and enacted, which seems applicable to RPGs given that they have occasionally been described in terms of "collaborative storytelling" (Padol 1996). Critics of this definition disagree that a diegetic framework is suitable to describe this type of game in its entirety (Montola 2008) and an application of this can be seen, for example, in the proposed structure of role-playing games which includes a game level and a social level, as well as the diegetic level (Fine 1983).

Work on a formal, accepted definition of role-playing games is on-going.

### 1.1 Stereotypes: Who plays Role-Playing Games?

With the increase in diversity of role-playing games, they have equally grown in popularity during this period (ESA 2009). RPGs have emerged into the modern era as sophisticated phenomena which is now embedded in popular culture (Mackay 2001), having both influenced and been influenced by the media, literature and particularly films and television. While gaming has gone from strength to strength over the years, what can be said of the individuals who are involved in the hobby?

From early on in the conception of these games, there has been an enduring stereotype of role-players as being 'nerdy' (Lægran & Stewart 2003; Ruzycki-Shinabarger 2002; Tocci 2007). Individuals who engage in the action of playing a role-playing game are regularly portrayed by the media (particularly in film and television) as being unpopular, and have also been labelled, both in the media and by peers, as 'nerds', 'dorks' and 'geeks'

amongst other things (Kinney 1993). "Gamers and Computer enthusiasts" are seen as belonging to a community which is characterised as "Nerdy" (Lægran & Stewart 2003) and generally existing within the demographic of white, male youths (King & Borland 2003).

The implication of any stereotype is that there are specific attributes which define all individuals as part of that group. The clinical psychologist David Anderegg (2007) has laid out the foundations of 'nerdiness' as follows:

"(a) unsexy, (b) interested in technology, (c) uninterested in their personal appearance, (d) enthusiastic about stuff that bores everyone else, and (e) persecuted by nonnerds who are sometimes known as jocks."

The 'nerdy' stereotype at its extreme can portray those involved as believing that they are highly intelligent and with a good imagination, well-educated with extremely detailed knowledge about specific unusual hobbies or topics, with strong feelings for-or-against war, and very poor social skills, tending to disregard social norms (Fine 1983).

In the media of the eighties and nineties, however, role-playing games gained some hostile attention and were occasionally depicted as causing players to become involved in criminal activity. Branch (1998) presents a list of news articles in which games have been used as scapegoats for a range of crimes – as a general rule, these cases involved the perpetrator of a crime admitting that he played *Dungeons & Dragons* or another role-playing game. On occasion, even more serious matters such as murders and suicides have also been claimed by the media and certain religious fundamentalists to have emerged from involvement in role-playing games (Schnoebelen, n.d.). Some more outrageous criticism also proposes a link between RPGs and involvement in satanic cults and even claims that by playing *Dungeons & Dragons*, gamers may gain the ability to cast "real" spells (Chick 1984). The less extreme stereotype, one which is more enduring than the above, portrays the gamer as a teenage boy or a grown man, with poor social skills and little interest in his personal appearance (Anderegg 2007; King & Borland 2003; Williams 2003). The viability of these persistent stereotypes will be investigated in terms of demographics, interests, personality and identity.

## 1.2 Demographics

The stereotypical demographic of a gamer is of a teenage boy – “mostly male, mostly young and mostly white and middle class” (King & Borland 2003).

Indeed, one study carried out on a particular fantasy role-playing MUD called *Blue Sky* found that the majority of its typical players were actually male, young, white and middle-class, adding to this the finding that the majority of players of this game were heterosexual (Kendall 1999). Williams (2003) agreed with the classification of game players as being male and young, adding to this that they lack social skills and may have pale skin owing to spending very little time outdoors. Douse & McManus (1993) studied a particular fantasy play-by-mail game and supported the idea that players were more likely to be male, adding that there was a tendency of gamers to be educated – a factor that may reinforce the idea that players are more likely to come from a middle-class background (Kendall 1999, King & Borland 2003). Taylor (2006) pointed out that the idea of gaming as a male-dominated hobby is held, not only by male gamers and the media, but also by women who are involved with games, and who “hesitate to call themselves gamers”.

Focussing on these studies, we can see a trend emerge: there is agreement that the majority of players are male, and almost unanimous consensus that game players are young, and along with these there is evidence that players may have a tendency to be white, pale-skinned, middle-class, educated and with poor social skills. However, since these studies focused on very specific games, it is not possible to generalize the result to the broader population of gamers.

In contrast to these studies, however, recent statistics from the Entertainment Software Association (2009) indicate that, in the USA at least, only 18% of gamers fit the description of the average gamer as a teenage boy, while females over the age of 18 appear to make up 34% of the gaming market – this being absolutely contrary to the gender aspect of the pre-existing studies. In fact, although it is still perceived as a hobby which is almost entirely dominated by male youths, almost 40% of all game players are women, and the average age of those who play games is 35 years (ESA 2009), up from 33 years in 2006 (ESA 2007). This is a huge contrast to general observations in the eighties where it was believed that the age of gamers was actually decreasing (Smith 1980). In terms of age, it has also been indicated that while

83% of teenagers engage in game-play and 67% of teenagers play online games, 40% of adults are also involved in some kind of game-play (Williams et al. 2008) so it is not entirely exclusive to young individuals. In contrast with the stereotype, the same study found that the majority of players are in their 30s (Mean: 31.16 years old), and more players are in their 30s than in 20s or teens. The gender difference and race difference, however, holds up in this research, finding that 80.8% of players are male, and that white Caucasians and Native Americans have the highest rates of play. The demographics based on race, class and education have yet to be examined on this basis, and would most certainly be worthy of further investigation.

An interesting study which investigates the online game, and MMORPG, *Everquest*, compares adolescent gamers against adult gamers, and finds that there is a higher percentage of male gamers (93.2%) in the adolescent sample than in the adult sample (79.6%) (Griffiths et al. 2004a). It should be noted, also, that this study had a significantly larger sample size (n=540) than other demographics studies cited here. One finding of this study, which appeared to be particularly incongruous when compared to related research, indicated that almost one third of the adolescents in the sample had left school before reaching 11 years of age. Another publication by the same group (Griffiths et al 2004b) cites the percentage of male game players to be 81%, and the mean age to be 27%. Yee (2006) states that the age range for this type of game – MMORPG – is 11 years to 68 years.

The stereotype of the game player involved some basic demographic information – primarily that the stereotypical gamer is young and male, from a middle-class background and probably well-educated. While a number of studies (Douse & McManus 1993; Kendall 1999; King & Borland 2003; Smith 1980; Williams 2003) have backed up this stereotypical image of a gamer, and added other aspects such as a tendency towards heterosexuality and lack of social skills, the claims made by the Entertainment Software Association (2007, 2009) from their survey based data largely refute these stereotypical images of gamers. It appears that the number of female gamers has actually increased and is continuing to do so, and also – contrary to Smith’s (1980) observations from the eighties that the average age of gamers was decreasing – it now appears that the trend has turned around and the average age of gamers is increasing.



It must be noted, however, that although the earlier demographic-based studies focussed on a few very specific games and therefore are not generalisable to the general role-playing population, the more recent demographic data which comes from the Entertainment Software Association (2007, 2009) is based on a very broad spectrum of games, including non-role-playing games and therefore is also difficult to generalise to the population of role-playing gamers. It would be beneficial to carry out an investigation into the demographics of role-playing gamers specifically, but focussing on a far broader range of games which fit into the genre of RPG.

## 2. INDIVIDUAL DIFFERENCES

Individual Differences is an area of modern psychology which investigates the ways in which people are different from one other and the ways in which they are similar, in their behaviour, their thinking and emotions (Ellis 1928; Eysenck & Eysenck 1985; Hampson & Colman 1995).

A stereotypical image of role-playing gamers depicts them as lacking in social skills (Williams 2003), often coming across as shy and introverted (Bainbridge 1976). On the contrary, Hall (1988) found that playing fantasy Role-playing Games actually caused an increased socialization of some shy students as an incidental result of the improved writing ability and vocabulary caused by the games. A more recent study found that socialising online, as opposed to offline, was preferable to 21% of gamers (Hussain & Griffiths 2008); however, this came from a study with significantly more male participants than females in the sample so there may be some bias. Bias or no, this is an interesting result in that it may highlight the idea of role-playing gamers as being conventionally introverted, as they tend away from traditional forms of socialising.

An investigation into the specific interests of fantasy role-playing gamers found that those who were highly involved in fantasy games were more likely to describe themselves as being "scientific", and were more likely to include "playing with computers" and "reading" as items in their list of interests than the control group who were matched with the gamers in terms of age, sex and level of education (Douse & McManus 1993). As well as this, gamers were cited as being *less* likely to include "going to the cinema, theatre or concerts" and "going to parties" as interests. This appears to reinforce the stereotypical image of gamers as being

introverted and quite shy. There was a small difference in personality found between the groups in this study, although there is a possibility that this difference could be of the same magnitude as the difference present between any groups involved in different hobbies.

## 3. PERSONALITY

Personality is defined as "the dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations and behaviours in various situations" (Ryckman 2004). There are many different questionnaires currently used to create a personality profile, and the research into personality in Role-playing Games over the years has employed a wide variety of these.

### 3.1 General Personality Traits

Many studies into Role-playing Games have used Cattell's 16 Personality Factor Questionnaire (16PF) to create a personality profile of gamers. The 16PF is a multiple choice questionnaire designed to measure where an individual's score lies in relation to fundamental traits of the human personality which include *inter alia* Openness to Change, Emotional Stability, Warmth, Perfection and Dominance. Originally, Cattell had 16 primary traits that were developed through factor analysis of everyday behaviour. However further factor analysis was carried out on these 16 traits to develop five global factors known as the *Big Five* model – Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism (Goldberg 1990), and to some extent, the Big Five has overtaken the earlier work (John et al. 2008). Nonetheless, the 16PF has been utilized in many studies of role-playing games with relatively enduring results.

Simon (1987) was one of the first to attempt to disprove the harmfulness of games such as *Dungeons & Dragons* to their players. His study, using the 16PF, was carried out with 68 participants, all of them game players but with no control group. Simon's aim in this study was to pay particular attention to Factor C: Emotional Stability and this yielded perfectly healthy personality profiles with an increased level of Cattell's factor Q1, 'Experimenting; Liberal; Freethinking', as the only unusual result.

Following his original study on the emotional stability of those involved with *Dungeons & Dragons*, Simon (1998) carried out Cattell's 16PF on

24 participants who played the game *Vampire: The Masquerade*, expecting to see a difference in the Emotional Stability factor, but in this study the increased level of factor Q1: 'Experimenting; Liberal; Freethinking' of his previous study was not replicated. The reason for this is unclear, but it is suggested that it may be because of the more modern world game setting.

Carroll and Carolin's study (1989) did not focus solely on RPGs, on this occasion the participants were also involved in other genres of games, although they again used the 16PF. Carrying out these personality tests on 75 University Students, they found gamers to be "normal" but also demonstrated that the fantasy Role-playing gamers scored higher on Cattell's factor Q1 – 'Experimenting; Liberal; Freethinking'. This corresponds with the findings of Simon's *D&D* based study (1987), where participants also had a higher level of factor Q1.

With the wide variety of scientifically validated personality tests available today, it makes sense that not all studies of RPGs used the 16PF to examine personality. A survey-based study was carried out by Yee (1999), with 100 participants who played Role-playing Games and a control group. This survey included an approximation of three of Goldberg's Big Five factor domain scales – namely Extraversion, Agreeableness and Openness. A significantly higher rating for 'Openness to Experience' was found for role-playing gamers.

There is a similarity between 16PF Factor Q1 'Experimenting; Liberal; Freethinking' (as seen in Carroll & Carolin 1989; Simon 1987 & 1998) and Goldberg's Big-5's Factor 'Openness to Experience' (as seen in Yee 1999), considering that Goldberg's Big-5 were originally derived from Cattell's 16PF. As such, it is not surprising that Role-playing gamers have been shown to have increased scores in both of these factors.

Douse & McManus (1993) looked at the personality of fantasy game players using the Bem Sex Role Inventory, Decision-Making Questionnaire, Eysenck Personality Inventory and Davis' Empathy Questionnaires. With 35 participants, 92% of which were male, involved in a fantasy role-playing play-by-mail style game and a matched control group, Douse & McManus found any analysis of sex difference to be impossible due to the gender imbalance within the group studied. They found that game players were involved in

playing 11.4 hours per week on average: almost five times as long as the control group who played for 2.5 hours per week. The study showed that players were less feminine and less androgynous on the Bem Sex Role Inventory than the control group. Players were found to display significantly lower scores of empathic concern on Davis' Empathy Questionnaire, which is unusual because high scores on this trait were reported as "prone to anxiety and shyness". There was, however, no significant difference in scores on this questionnaire for fantasy, perspective taking or personal distress. Yee (1999) points out that he finds this study to be biased owing to the fact that computer/email preference is, here, confused with role-playing games.

In 1990, DeRenard & Kline (1990) conducted an investigation of 35 role-playing gamers who played *Dungeons & Dragons* with a control group of 35 non-players, in which a questionnaire with the anomia scale was employed. Individuals in the control group reported having feelings of 'meaninglessness' and the researchers speculated about whether their involvement with the game gave players a sense of purpose. Game players were found to have a slightly higher score in "cultural estrangement" than the control group – implying a lower awareness of popular entertainment. It was noted, also, that those participants who were more deeply involved in the game (who spent more money on materials, and more time playing, for example) had higher reported feelings of alienation than the other participants. These feelings of alienation could warrant further investigation, although given the small sample-size, it is currently not possible to generalise the result to the population of gamers at large.

### 3.2 Neuroticism & Psychoticism

In a study undertaken by Carter & Lester (1998), using the Eysenck Personality Inventory and Beck Depression Inventory, involving participants who played *Dungeons & Dragons* and a control group of male undergraduate non-gamers, there was no significant difference found to exist between the gamers and the control group. No difference was found between the two groups in mean scores on depression, suicidal ideation, psychoticism, extraversion or neuroticism.

Rosenthal et al. (1998) carried out a similar study where they compared 54 Gamers with 64 non-gamers – in this case, the non-gamers were national guardsmen. The findings were that the

stereotypical gamer is male and has similar numbers of close friends to the guardsmen. The study failed to confirm the stereotype of a gamer as “withdrawn, emotionally immature adolescents” although gamers reported slightly longer time spent sleeping and daydreaming than the guardsmen. No difference was found in the measure of Neuroticism between the two using a separate neuroticism scale.

In the Douse & McManus (1993) study, cited earlier, they used the Eysenck Personality Questionnaire with 35 Gamer participants and 35 members of a control group and showed that players were likely to be significantly more introverted than the control group but no difference was found for neuroticism or social acquiescence.

It is difficult to prove a negative, given the logic which is an integral part of scientific hypothesis testing – a study’s sample could have been badly drawn, for instance, and this would affect the results. Taking this into account, it is still important to note that there have been three studies which have replicated negative values for neuroticism for their samples of gamers.

### 3.3 Crime, Violence & Cultic Practices

Implications regarding the supposed tendency of role-players to extreme deviation from the norm as regards crime, violence and cultic practices have also been researched. There is a popular belief that those who play games are more prone to criminal behaviour, and these games have been portrayed in the media as causing this disposition towards violence and crime. Fine (1983) describes a stereotype of fantasy role-playing gamers as well as war-gamers, as exclusively having an interest in war and killing.

While this belief had existed for many years, it experienced a lot of media attention from 1999 onwards owing to the discovery that two American high-school students who stormed their school and shot 15 people in the so-called ‘Columbine High School Massacre’ were also heavily involved in computer games and in fact used one of their favourite games to play out their rampage multiple times before carrying it out in reality (King & Borland 2003).

King and Borland describe the aftermath of this discovery in detail. Following the revelation, a surge of disapproval, criticism and “hostile attention” affected the culture of gaming – as well

as the gamers themselves. Subsequently, attempts were made to sue games designers and games companies by families of the individuals affected by the events at Columbine, as well as other similar events which were perceived as being caused by involvement with Role-playing Games. During many of these cases, doctors appeared and gave professional opinions about the detrimental effects of games, without having carried out any medical research in the area, and the media continued to portray games as dangerous. Despite all this, the cases were thrown out of court as the judges declined to rule on them – but the damage had been done and “the stigma had stuck” on the game industry (King & Borland 2003).

Further criticisms of computer games caused the industry to instigate a rating system for games so that individuals – particularly parents – would be informed about the content of games before purchasing.

RPGs as a cause for criminal activity are more of a historical myth at this stage, in the US, with no evidence or court cases which have ruled to this direction, and we should move beyond those implications now. Violent video games are still often touted by the media as being a cause for crime and violent behaviour, but the spotlight has moved beyond RPGs at this stage.

Abyeta & Forest (1991) began their research on the then-popular belief that role-playing games caused the players to be unable to distinguish between fantasy and reality and individuals who played regularly became involved in criminal behaviour. Virtually no difference was found to exist between role-players and non-role-players beyond that psychoticism had a higher incidence in the non-role-players than in role-players. This finding, however, was not very reliable due to the very small sample size – 20 gamers with a non-gamer control group of 25 – which renders the findings open to the possibility of sampling error.

As regards the extreme claims that gamers may be involved in satanic practice (Bourget et al. 1998) and demonic rituals, Leeds (1995) used the Eysenck Personality Questionnaire on 217 adult male participants to measure levels of psychoticism, extraversion and neuroticism. There were three groups of participants, those who played fantasy role-playing games (n=66), those who were involved in satanic dabbling (not fully committed to Satanism) and were not involved in gaming (n=26) and a control group of non-involved college

undergraduates (n=125). As well as Eysenck's Questionnaire, the participants were asked to complete the Belief in the Paranormal Scale and the Satanic and Fantasy Envelopment Scale (SAFE). After carrying out a series of one-way ANOVA'S and Pearson Correlations, there was found to be a significant difference between fantasy gamers and satanic dabblers in all of the measures used. This evidence suggests that either the popular hypothesis that role-playing games are a precursor to players becoming involved in satanic practices is incorrect, or that role-players who do become engaged in satanic practices undergo a significant personality change before doing so.

Schnoebelen (n.d.) lists 11 murders and suicides which are claimed to be caused by involvement with Dungeons & Dragons. One study (Carter & Lester 1998) showed no difference in level of suicide ideation, depression, neuroticism or psychoticism between gamers and a control group but such comparison can be easily biased by the composition of the control group. Stackpole (1989) investigated suicide rates of those involved with role-playing games by calculating the expected suicide rates per the gamer population, then, an estimated 4 million players worldwide. The estimated suicide rate for this population would be 500 individuals, per year. However, in his study, Stackpole had documented only 7 suicides of game players per year, and inferred that playing Dungeons & Dragons appeared to cause a lower suicide rate amongst the youth involved in it. He also suggested that role-playing games could even be used as a public health measure due to these findings.

It should be noted that confirmation bias may play a part in the tenacity of the media when it comes to the detrimental effect of games on the players. Confirmation bias (Klayton 1995), or confirmatory bias, is a prejudiced way of looking at information, and causes an individual "to seek and interpret information in ways that are partial towards existing beliefs" (Ask & Granhag 2005). Individuals have this inclination towards favouring information which stands to confirm a pre-existing ideas and hypotheses, and interpreting information in a prejudiced way, regardless of the truth of the information in question.

Another example of this was seen in the media in 2001, where Microsoft's Flight Simulator software, designed for amateur enthusiasts, was depicted in playing a major role in the 9/11 terrorist attacks in New York, as the perpetrators were said to have

used this software to practice their attack. The fact that a small number of terrorists used this software does not, by any stretch of the imagination, imply that use of the software causes individuals to have a tendency towards such crimes.

#### 4. IDENTITY

Identity is an individual's sense of self, comprising characteristics which make them distinct and unique from others, and also characteristics which correspond with others. Many different aspects combine to create an individual's sense of identity; their gender, background, ethnicity, religion, self-assessed personality characteristics and traits, membership in groups such as family or non-familial social groups, their perceived role in their relationships, role at work, and their goals in life.

For each individual, these aspects may be seen more strongly as part of the identity, or less so, depending on the importance placed on each of them by the individual. Identity is not fixed, it can and does change and re-form many times during a lifespan owing to changes in situation or perspective and re-evaluation of values.

The most relevant types of identity, which comprise the main body of work on identity with respect to role-playing games, are personal identity, social identity and gender identity.

##### 4.1 Child's Play and Identity Development

Through much of the research on child's play in the early years, certain themes recur often, namely the presence and requirement of *roles*, *rules* and *imaginary situations* as part of this type of play. According to one group (Verenikina et al. 2003) there is an essential characteristic in child's play, "a dimension of pretend...interactions in an imaginary, "as if" situation, which usually contains some roles and rules and the symbolic use of objects." Free play within this imaginary setting enables the child to "explore the roles and rules of functioning in adult society."

According to Vygotsky (1934) "Imaginary situations of any form of play already contains rules of behaviour." These are not necessarily rules which are formulated previous to play but are merely automatic, situational rules which come about from the existence of an imaginary situation. In playing a game based in a medieval style fantasy world, for example, an automatic situational rule exists in that a character would not have at their disposal modern technology such as a



computer with internet access or mobile phone. Conversely, while it is possible to use the existence of technology to aid characters in a game in a more modern urban setting such as New York City, magic, mythical creatures or ancient modes of transport, for example, would be equally incongruous.

“Just as the imaginary situation has to contain rules of behaviour, so every game with rules contains an imaginary situation” (Vygotsky 1934). The relationship between imaginary situations and rules, therefore, goes both ways. The example used by Vygotsky to explain this is a game of chess. Chess is a game with rules, and an imaginary situation wherein the pieces, each with its different role, can only move in specified ways, and where the taking of a piece is a concept which exists purely in the game of chess – there is no direct proxy for this action in real life.

There has been much discussion about the idea of “make-believe” ‘play’ – in its traditional sense, occurring in an “imaginary, illusory world” (Vygotsky 1934). This description of child’s play sounds very similar to the previous descriptions of role-playing games, where the participants enact roles within an imaginary setting and through this enactment, the situations and characters develop within the rules and framework of the game.

From this description, it can be seen that role-playing games are similar to child’s play in three ways: in both of these activities roles and rules are essential, and there is an importance on interactions within an imaginary setting. It can be considered that some role-playing games, with their detailed rulebooks and reliance on numbers and dice-rolling to determine outcomes, are the same kind of activity though at a more advanced level than traditional child’s play.

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Imaginary play is important for children’s development, one description insisting that it contains all of the child’s developmental tendencies “in a condensed form” (Vygotsky 1934). This

includes identity development which occurs early on in childhood, although identity changes and transforms at many stages throughout life. Children use play to “explore the roles and rules of functioning in adult society” (Verenikina et al. 2003) which children will need in their adulthood, and they may also use it to rehearse their own roles in the present and “play at reality” (Vygotsky 1934).

In this type of reality-based play, the child plays an exaggerated version of herself. An example of this is when a pair of female siblings play at ‘being sisters’. During this play, the children emphasize the relationship between the two, as sisters, and go out of their way to display the aspects which stand to highlight this – for example, sharing toys, talking and dressing alike. As part of this emphasis, the children will also stress the importance of the aspects which stand to make them different from other people, and this also helps the children to reinforce and highlight their current roles and relationships.

It could be considered that when Verenikina et al. (2003) mention the acquisition of the “foundations of self-reflection” through play, reality-based play fits into this theory, as it enables the child to examine and reflect on existing aspects of their identity.

This idea of identity development is touched on in Vygotsky’s research on child’s play also, and the development of the basis of self-reflection can be seen in children when they engage in imaginary play (Verenikina et al. 2003). By putting on a role, a child can discover new ideas and develop new skills, and consequently the child may incorporate these ideas and their newly discovered social norms into their identity – such as heroism in the case of playing a superhero saving somebody’s life, or loyalty in the case of playing a good friend to somebody else (Vygotsky 1934).

#### 4.2 Personal Identity

Personal identity refers to the way in which an individual defines the self “in terms of idiosyncratic personal relationships and traits” (Hogg & Vaughan 2002) and according to Wallace, games add to the sense of identity and self (1999). In contrast to the idea that involvement in (violent) RPGs can lead to real world involvement in violence and Satanism, researchers involved in the development of identity in role-playing games generally affirm that games have a positive development function in adults, just as with

children.

Role-playing gamers are “constantly creating and performing a variety of identities”, whether they are using tabletop games, MUDs or online games such as Everquest as their platform (Taylor 2006). Taylor & Walford (1972) state that all that is necessary is for “the participant to accept a new identity...and act and react as appropriately as possible”.

The question “Do you believe it is possible to identify so strongly with one’s character that it becomes one’s primary identity (i.e. does, in your opinion, “character immersion” exist)?” was answered by 40 Live Action Role-Playing gamers from Europe (Harviainen 2007). 82.9% of answers were positive, with 93.8% of these stating that they had experienced immersion themselves.

“Users can construct identities that may or may not correlate to their offline persona”; they are not ‘bound’ to make sure their online persona corresponds with their offline identity (Taylor 2006). It can be seen, nonetheless, that the persona created within an online role-playing game can impact on the player’s real-life identity. Taylor describes an individual handing out roses at a convention, which he does in-game, as in an act of creating a parallel with his online identity, almost as an “offline incarnation of his online persona.” This, of course, can work both ways. In online role-playing games, one often finds participants sharing virtual drinks and physical signs of affection. Even barring *conscious* efforts to mimic online personae, role-playing can have a real effect on offline identity. For females, “identity exploration” is considered to be a primary play goal, and it has been reported that “...virtual world experiences ‘filter back’” with women finding that they have become more confident due to their experiences in the game (Taylor 2006).

Affirmation of identity is what players endeavour to find through virtual play, and Bartle (2001) sees immersion, the level of involvement in a game, as an aid to convey this affirmation of identity. Bartle describes the highest level of immersion, termed ‘Persona’, in a very clear way:

*“A persona is a player, in a world. Any separate distinction of character has gone – the player is the character. You’re not role-playing a being, you are that being; you’re not assuming an identity, you are that identity. If you lose a fight, you don’t feel that your character has*

*died, you feel that you have died. There’s no level of indirection: you are there.”*

So, players can construct online personae which are very unlike their offline personality, they can create ones which are also very similar, and the construction of an online identity can have an effect on their real-life identity. ‘Drift’ is the term given to the phenomenon of players and characters changing to fit one another (Bartle 2001). When a player is more aligned with his character, he may also be more immersed in the character and the virtual world. The ideal is seen as being when one reaches full immersion and character alignment at the same time and pace.

**The construction of an online identity can have an effect on real-life identity. Drift is the term given to the phenomenon of players and characters changing to fit one another.**

What we find, therefore, on the one hand there is a separation of identities (real identity vs. constructed identities) and, on the other hand, there is a ‘drift’ between these identities, in both directions. This mirrors the “reality based play” of children, discussed in the previous section.

Immersion is the extent to which one is willing to take on another identity as her own and in online role-playing games, players are given the opportunity to create multiple new identities for themselves, and “become authors...of themselves, constructing new selves through social interaction” (Turkle 1997). Immersion could, therefore, be considered as an important element which allows for ‘drift’

If a player either reaches total immersion before finishing alignment with the character or is happily aligned with the character before fully being immersed in the game, he may feel a sense of dissatisfaction. The designer’s job is to try to ensure that the players “become their characters at roughly the same time that their characters’ skills become internalised”. It is not certain, however, what the link between the two facets is.

Identity is an important issue to consider when the objective of immersion in a role-playing game is to take on the role of a completely discrete entity. Some individuals spend the majority of their free time playing online games, enacting a character. In

this way, an individual can create his identity and attempt to embody the role that he is playing, but he has also created the initial possibility for creating the identity that he wishes himself to have.

### 4.3 Gender Identity

In contrast to the literature on personal identity, studies on gender and social identity are more descriptive and it is difficult to draw general conclusions in these areas. For instance, it is said that games can "...allow access to gender identities that are often socially prohibited or delegitimized offline" (Taylor 2006), which is obvious. But what is the effect of such experimentation?

Interestingly, in a study on gender swapping and socializing online, Hussain & Griffiths (2008) found that 21% of gamers preferred socializing online to offline, when given the choice, and it was shown that 57% of gamers took part in gender swapping online. Reid (1995) found that reactions to such gender swapping could be very passionate – with many believing that it is a form of "deceit" or "cheating" even within the boundaries of a role-playing game. Wallace (1999) stated that in the example of an online MUD (Multi-User Domain), those who were 'female-presenting' (putting forward a female persona/ character) "tended to receive more attention and chivalry in the form of hints and gifts, and occasionally received more harassment". Also, while 15% of individuals were female, 25% of people on this game presented themselves as female. This suggests that the 10% of males presenting themselves as female have some kind of agenda, perhaps a role in leveraging attention. It would be very interesting to examine the presence or absence of 'drift' in this type of player.

### 4.4 Social Identity

Social identity is used to define the self in terms of social group memberships. Being involved in role-playing games generally involves being part of a group by their very nature. There are computer role-playing games (CRPGs) which involve a single player approach, moving through a set storyline, in which no interaction with players is necessary or even possible. Even online MMORPGs give the scope for solo-play, but to achieve certain goals within these games it generally becomes necessary at some stage to align oneself with other players, whether temporarily in a 'Pick-Up-Group' or for much longer time periods in a 'Guild' or 'Clan'.

Playing tabletop role-playing games or Live Action

Role-playing games involves playing with a group of players which can vary in size from 3 or 4 to hundreds during big live action events. Gaming societies of all sizes tend to exist when gamers come together in schools and colleges and in towns and cities worldwide. Although gamers are sometimes thought of as being solitary, the majority of games require two or more individuals to play, and so gaming groups come together out of necessity for the hobby.

Grantham Aldred (2009) describes gaming groups in terms of folk groups with particular traditions attached involving shared jokes which "reference the various tiers of cultural identity" which are possessed by members of the gaming group.

Thus, although the games are a virtual experience, away from 'reality', participation in a gaming group is a real experience. Gender crossing as described above may be negatively perceived as violating the virtual/real boundary: in effect, a taboo.

## 5. SUMMARY

Contrary to the stereotypic image of the game player as an anti-social 'nerd' who finds it difficult to create or maintain relationships with others, the image that is being developed in the light of the reviewed research is of an individual who is actively seeking to develop his own identity through 'drift' and who is involved in game-based social networks that involve their own fairly complex collections of norms and taboos.

The aim of this paper was to investigate the existing research that has been carried out with reference to role-playing games and stereotypical characteristics of gamers, and draw up a review of literature concerning child's play and role-playing games and the importance of imaginary play for identity development. The research can generally be divided into four main sections: Demographics, Interests, Personality and Identity.

In terms of demographics, although many of the older studies appear to back up the idea that the vast majority of gamers are male, young, well-educated and from a middle-class background, more recent data would suggest that the hobby is becoming more balanced in terms of gender, and that the average age of gamers is in fact increasing rather than decreasing.

In respect to personality, little or no evidence has been found to support a difference between role-

playing gamers and the non-gaming population. The few differences that have been found appear inconclusive owing to small sample sizes in some studies, and in other cases further research is required in order to fully confirm the findings.

**Little or no evidence has been found to support a difference between role-playing gamers and the non-gaming population.**

In summary, role-playing gamers have rarely been found to deviate from the rest of society as regards personality. Slightly higher scores for Q1 ('Experimenting; Liberal; Freethinking') and Openness to Experience have been found in a number of studies (Carroll & Carolin 1989; Simon 1987; Yee 1999). This was to be expected, to an extent, as one facet to Openness to Experience involves having a tendency towards fantasy and having a vivid imagination and unusual ideas, all of which are involved when taking part in a role-playing game.

Game players were shown to be more likely to be introverted, in their interests and activities, yet they are also more likely to have a significantly lower score of empathic concern although high scores of this factor report as being "prone to anxiety and shyness". Role-playing gamers were seen to have a higher level of "cultural estrangement" i.e. a somewhat lower awareness of popular entertainment, perhaps owing to the fact that they have very specific niche areas of interest which may differ from other populations.

The claims that players are more likely to become involved in cults, or carry out crime or violence towards the self or others have been investigated and there is some evidence to the contrary for each of these claims, in that none of these claims stood up in court, and no clear evidence was found in their support. It has been indicated that players also scored no higher in neuroticism, psychoticism, depression, suicidal ideation, extraversion, perspective-taking or personal distress than non-gamers.

The control group (non-gamers) of DeRenard & Kline's study (1990) reported experiencing higher feelings of 'meaninglessness' than the game-playing group, and it is suggested that the advent of the fantasy role-playing games in the lives of the

game players stands to give extra meaning to the individuals involved. An assertion has been made that participation in RPGs may, indeed, serve a developmental function in terms of personality growth and development of social identity. It has also been suggested (Stackpole 1989) that owing to the low rates of suicide amongst role-playing gamers in comparison to that of non-gamers, that these games could have some benefit if used as a public health measure.

## 6. CONCLUSION

Looking at the research as presented in this review, it can be seen that many varied aspects of the stereotype of role-playing gamers have been investigated by researchers.

Considering the volume of research that has been carried out in relation to role-playing games and their effect on the players, it is unfortunate that a greater number of variables are not being taken into consideration. Heretofore, the focus of the research in this area and the range of variables studied have been narrow. In the main, this work has been concerned with general demographics trends and involved the use of a variety of different personality measures, many of which show very few differences between role-playing gamers and non-gamers.

It is of concern that much of the existing research replicates similar test designs – one group of participants who are gamers, a control group of non-gamers, and the use of a chosen personality questionnaire – with little to differentiate them from previous studies. It is to be regretted that more variables have not been operationalised.

Even the briefest examination of existing studies, particularly the pre-2003 demographics-based studies, indicates the necessity for larger and more balanced samples. Many of the existing studies fall down on the fact that they have almost entirely male participants. While this fact may reflect the general population of gamers, it renders the results of certain research studies virtually uninterpretable – for example Douse & McManus (1993) use of the Bem Sex Role Inventory. For such a popular activity, it is imperative that broader studies are carried out on gamers.

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