
Susanne Poeller
University of Saskatchewan
Canada
susanne.poeller@usask.ca

Martin Dechant
University College London
United Kingdom
m.dechant@ucl.ac.uk

Regan L. Mandryk
University of Saskatchewan
Canada
regan.mandryk@usask.ca

ABSTRACT
Tabletop role-playing games are experiencing a peak in popularity and prior work shows that role-playing can be beneficial for mental health. While little research effort has been invested into this area, most studies point towards positive outcomes of playing tabletop role-playing games. This work explores the potential for the acceptance of flaws through role-playing by comparing how novice and expert players approach character creation. The results of this exploratory study show that experienced role-players are more likely to report that they want to play a character with weaknesses and less likely to be interested in playing a flawless character. Additional findings and implications are discussed in the paper.

CCS CONCEPTS
- Applied computing → Computer games; Consumer health; Human-centered computing → Empirical studies in HCI.

KEYWORDS
tabletop, role-playing, TTRPG, Dungeons & Dragons, D&D, character creation

ACM Reference Format:

1 INTRODUCTION
Video games and other immersive media, such as virtual reality, have been suggested as a tool for assessment and a treatment platform for various mental health concerns [20]. One idea is the exploration of in-game role-play: role-playing as part of a therapy session can help individuals to see a situation from a new perspective. Tabletop role-playing games (TTRPGs) like Dungeons & Dragons are experiencing a resurgence in popularity [30]. In these games, players create a character, and come together with other players and a game master (who creates the environment) for collective story-telling. Groups can vary, for example through the rule set they use (e.g., Dungeons & Dragons 5th edition), or whether they voice act, or even cosplay (dressing up as) a character. Some groups play entirely through 'theatre of the mind', while others use miniatures and build scenes out of materials, such as cardboard or wood. Other groups play online using voice chat and/or virtual software (e.g., Foundry VTT, Roll 20, or Fantasy Grounds). No matter how a group is playing, in each campaign players face the question of who their character should be and thus, through which lens they will experience the story. Role-playing, theatre, and digital games can offer social spaces which help certain individuals (e.g. those who are affected by social anxiety) to explore feared situations from a different perspective. TTRPGs may offer such spaces as well and therefore it is valuable to understand them empirically. In this study, we explore differences between novice and expert players when it comes to character choices, to gain a first understanding of the lessons that tabletop role-players learn through this hobby.

2 RELATED WORK
That role-playing can be a powerful tool in mental health is not a novel concept. In 1966, Elms had smokers role-play to convince other smokers to quit smoking and found that those who role-played were more likely to change their attitude towards smoking than those who listened to the role-players’ argument [10]. Similarly, dramatherapy can be helpful to children with Autism Spectrum Disorder through providing a safe place to explore, being included in a group, learning and practicing social skills, providing structure and supporting families [14]. Even though previous work has identified benefits of playing tabletop role-playing games, there is still a lack of research in this area [16].

2.1 Role-Play Exploration and Mental Health
Cognitive Behavioural Therapy (CBT) for mental illness such as social anxiety consists of cognitive restructuring and exposure to feared stimuli, such as social interactions [28]. Exposure helps patients to restructure their mental image of themselves, the situation, and their surrounding environment. There are several adaptations of exposure therapy, ranging from different formats (e.g., individual vs. group interventions), settings (e.g., outpatient or inpatient services) and durations. Gradual exercises targeted at feared situations (such as performing in front of others) help patients to alter their mental model of feared stimuli. Regarding social anxiety, prior work explored improvisation theatre and comedy as a way to help
individuals to navigate anxiety-inducing situations [12]. The key to success in such interventions is active play, since it allows for cathartic emotional expression and turns the therapy session into a fail-safe space for self-expression of feelings that are not socially accepted [24].

Tabletop role-playing games in particular have been suggested as a tool to help gifted children and adolescents to improve intra- and interpersonal skills [31]. Prior work suggests positive effects of playing TTRPGs on self-efficacy, especially in game masters [32], as well as higher levels of empathy in fantasy role-players compared to those who do not role-play [29]. Daniju [6] concludes that transformative role-play (a more systematic and educational approach to a TTRPG) can help players with their personal development; fostering knowledge acquisition, developing role-play skills, strengthening team-building and encouraging creative collaboration. Similarly, Bowman [5] describes role-playing games as holding the potential for individuation through active imagination, meaning that players can gain personal insights through reflection on play experiences. Building on insights about role-play, researchers began to look into other platforms that may allow for similar approaches. Mental health benefits of digital games have become a popular research topic [21]. Prior work in the digital context explored how allowing players to self-express through game mechanics, such as customized avatars, may affect the experience of social anxiety in an online game [8, 25]. Role-players are a sub-group that can be found in many online multiplayer games: role-playing can provide relief from social anxiety, burnout and social isolation for them [17]. A recent report summarized studies around TTRPGs such as Dungeons & Dragons, including their potential benefits and calls for more research in this understudied area [16]. To the knowledge of the authors, no previous work has explored the relevance of character flaws to tabletop role-playing. Accepting weaknesses and imperfections can be an important aspect of mental health [23]. Like prior work suggested [24], giving patients safe spaces to explore feared situations from different perspectives may help them to gain resilience against social stress. Accepting flaws in a character could be a potential way towards self-acceptance that is worth exploring.

We conducted a study to compare experienced tabletop role-players with less experienced players and complete beginners. Specifically, we compare choices that they make when creating a character to play with. The character is the lens through which a role-player engages with the fantasy world and through examining differences in those choices, we aim to understand what experienced players have learned about their role-playing preferences over time. After a character was created, we asked the participants to self-report their goals and preferences, such as how they want the character to relate to themselves or whether they would prefer to play a character with weaknesses or one that is flawless. This work provides insights in the way that role-players approach character creation and how experience with role-play can change the view of players on what makes a character interesting and fun. Such fundamental relationships are an important first step and they can inform hypothesis generation in future work, for example with the goal to design interventions to harness TTRPGs for mental well-being.

3 METHOD
We invited participants to an online study to create a character for a tabletop role-playing game (TTRPG), inspired most closely by Dungeons & Dragons (5th edition). To make decisions, participants were guided through the process with a questionnaire. For the purpose of the study, the process was simplified and does not include every option that players have when playing Dungeons & Dragons 5th edition.

3.1 Procedure and Material
First, participants were given a short and broad introduction to Dungeons & Dragons and the fantasy setting and then they were asked to create the character that they would like to play.

3.1.1 Character Creation. Participants were asked to select a race, class, appearance, ability rankings, an alignment, a background, ideals, traits and flaws for their character.

Character Race. The race options were Halfling, Gnome, Dwarf, Dragonborn, Tiefling, Half-Orc, Half-Elf, Elf, and Human. Participants were presented with example images, average height and weight, expected life span and a short description. For example: "Dwarves are usually between 120 and 150 centimeters tall, weigh 75kg on average and can live up to 400 years. Dwarves are often courageous, resilient, and known for being capable warriors. They are of a rather small stature and are often stoic and enduring. Their sense of justice can make it difficult for them to forget wrongdoings."

Character Class. Next, participants were asked to choose a class out of the following options: Fighter, Ranger, Mage (e.g., Wizard or Sorcerer), Rogue, Bard, and Druid.

Name, Appearance and Description. Participants were asked to name their character and indicate their gender (man, woman, non-binary) height, weight, and age. They were then asked to choose a hair-colour and style of clothing (e.g., traditional, practical, elegant, or extravagant) and describe the appearance in more detail if they wished to do so.

Abilities. After imaging the appearance of their character in this way, participants were asked to rank the six main abilities in the order of how strongly they are expressed in the character: Charisma, Strength, Dexterity, Intelligence, Wisdom, and Constitution. A short description for each ability was meant to help newer players understand them better (e.g., "Charisma is important for social interactions").

Alignment. Next, participants had to choose an alignment on two dimensions (1: good, neutral, evil; 2: lawful, neutral, chaotic) with a short description for both dimensions (e.g., "lawful characters adhere to rules and social norms, while chaotic characters follow their own ideas of what is right or wrong").

Ideals. Participants were asked to indicate what ideals their character follows in life. The options were: Power, Friendship, Ambition, Freedom, Glory, Faith, Creativity, Community, and Wealth. Each ideal was described with a few words (e.g., "Creativity - the world needs new ideas and bold actions").
Personality. Next, participants were asked to imagine their character's personality by selecting three traits from the following list: creative, reliable, deductive, empathetic, perfectionist, humorous, eager to help, innovative, ambitious, strong, freedom-loving, sociable, confident, brave, peaceful, intelligent, articulate, and honest.

Flaws. Participants were asked to select two flaws from the following options: arrogant, know-it-all, thieving, vain, suspicious, willing to resort to violence, lazy, reckless, easily scared, superficial, egotistic, gullible, and yielding.

3.1.2 Character Goals. After finishing the character creation process, participants were asked to self-report on their goals through 8 questions. Each question was answered on a 6-pt. Likert scale from 1: 'fully disagree' to 6 'fully agree'. Participants were asked whether they wanted their character to be 1: similar to themselves or 2: different from themselves, whether the personality of the character was 3: important or 4: unimportant to them. Whether they wanted their character to be 5: flawless, 6: or to have clear flaws, and 7: whether they would take additional flaws to improve more positive traits ('Traits') in return. Finally, they were asked whether they 8: identify with their character.

3.1.3 Tabletop-RPG Experience. We asked participants how familiar they were with different rule-sets of TTRPGs, specifically asking them about Dungeons & Dragons, Warhammer, Pathfinder, Midgard, Call of Cthulhu, and The Dark Eye. We then asked them whether they had played a TTRPG before, whether they had had one (as a game master), how familiar they were with TTRPGs on a scale from 1: ‘not familiar at all’ to 5: ‘very familiar’, and how many years ago they played a TTRPG for the first time.

3.1.4 Demographics. Lastly, we asked participants to indicate their gender and age.

3.2 Participants

We recruited 174 participants (108 men, 66 women, 0 non-binary) through university email lists, Facebook groups, and D&D themed discord servers. They were 27.8 (SD=8) years old on average. 130 participants had played TTRPGs before, 44 had not. Most participants had played Dungeons & Dragons (N=103), and The Dark Eye (N=74). Some participants reported that they had played or are currently playing Pathfinder (N=38), Call of Cthulhu (N=36) Warhammer (N=24) and Midgard (N=14). Participants had played TTRPGs for 10 years on average, with a high standard deviation of 9.9 years. 39 participants indicated that they were not familiar at all with TTRPGs, 18 indicated they were not familiar with them, 33 indicated average familiarity, 33 self-described as ‘familiar with TTRPGs’ and 46 reported being ‘very familiar’ with TTRPGs. The familiarity scale will be used in our analyses about comparing more and less experienced players, as it is more likely to capture frequency of playing, and overall level of immersion into TTRPGs as a hobby.

4 ANALYSES

This study aimed to explore differences between more and less experienced TTRPG players when it comes to character creation choices. Therefore, we simply report Pearson-correlations between experiences and making specific character choices in the study. We correlate TTRPG familiarity with choices of race, class, distribution of ability scores, alignment choices, chosen character background, personality, flaws, and the self-reported goals of participants when it comes to character creation in general. Due to the exploratory nature and the high number of correlations, we report significant correlations only, to provide a starting point for theory building and hypothesis testing in future work.

5 RESULTS

5.1 Character Creation Choices

Race and Class Choices. None of the class choices were associated with player experience. For race choices the only observed correlation is with choosing to play an elf. Elves were more likely to be chosen by participants with less TTRPG experience (r=-.26, p<.001). Even though there were 9 races, 45% (n=27 out of 59) of those participants who were not familiar with TTRPGs chose to play an elf. Elves were not unpopular with more experienced players either as the race was also chosen by 20% of participants who indicated that they were ‘very familiar’ with TTRPGs.

Ability Scores. We observed no correlations of player experience with ranking the importance of Charisma and Wisdom stats. Inexperienced players ranked Strength (r=.15, p=.04) and Intelligence (r=.27, p<.001) higher, while player experience was positively associated with prioritizing Dexterity (r=.22, p=.004) and Constitution (r=.23, p<.001).

Alignment. We found no correlation between player experience and choices made on the good-evil dimension. However, for the lawful-chaotic dimension we found less experienced players to be more likely to choose lawful characters and more experienced players more likely to choose more chaotic characters (r=.22, p=.003). Descriptively, lawful was the most popular option for players (n=19 out of 39) who were ‘not familiar at all’ with TTRPGs, while it was the least popular option for all other groups of participants.

Character Backgrounds and Ideals. We found no significant correlation between participant experience with TTRPGs and choosing any of the character background options, nor with the ideals their characters strive for. Descriptively, Recluse was the most commonly chosen background (n=54), while Temple Servant was the least common choice (n=10). Freedom was the most popular ideal (n=55) and Power was the least popular ideal (n=2) in our sample.

Character Personality and Flaws. There were few correlations when it comes to character personality. Less experienced players were both more likely to select ‘intelligence’ as a positive defining character trait (r=.24, p=.002) and more likely to choose ‘being scared (anxiety)’ as a character flaw (r=-.18, p=.02). Descriptively, the most popular positive traits were ‘freedom-loving’ (n=51) and ‘eager to help’ (n=50). The least popular traits were ‘perfectionist’ (n=11), ‘sociable’ (n=12), and ‘innovative’ (n=13). The most frequently chosen character flaws were ‘suspicious’ (n=51) and ‘reckless’ (n=50). The least popular flaw was ‘superficial’ (n=10), followed by ‘lazy’ (n=12) and ‘yielding’ (n=12).
5.2 Goals in Character Creation
We observe several significant correlations between player experience and self-reported character goal and attitude choices. Means and standard deviations for these items are displayed in Table 1.

Character-Player Comparison. Less experienced players were more likely to state that they wanted their character to be similar to themselves (r = .17, p = .03). Conversely, experienced players were more likely to agree with the statement that they wanted their character to be completely different from themselves (r = .26, p < .001).

Importance of Character Personality. Experienced players were more likely to state that the personality of their character was very important to them (r = .17, p = .03), while less experienced players were more likely to state that the personality of their character was secondary to them (r = -.18, p = .02).

Character Flaws. Experienced players were more likely to report that they like it when their character has clear weaknesses (r = .38, p < .001). Less experienced players were more likely to state that they would prefer to play a flawless character without having any weaknesses (r = -.32, p < .001). Experienced players were more likely to indicate that they would want their character to have more flaws so that in return they can take additional feats (strengths) (r = .18, p = .02).

Character Identification. We observe no correlation between experience and the extent to which participants reported that they identified with the character they had created.

6 DISCUSSION

6.1 Character Choices

6.1.1 Class and Race Choices. We did not identify a class that appealed more or less to new and experienced players. This indicates that there is not much difference when it comes to choosing a fighting style for a character between those who have played many characters and those who have not. This choice might be based on other factors, such as player type or personality [34], interindividual differences in motivation [26], or even gender stereotypes [2].

Similar to class choices, character race choices also do not seem to mainly depend on experience. The lack of such differences could indicate a balanced game design, where all classes and races are equally appealing. However, when it comes to race choices, it is apparent that Elves are very popular, especially for beginners. Elves are a common fantasy race and featured in popular worlds such as The Lord of the Rings [7, 9]. As such, they might provide an easy entry into the fantasy genre. Perhaps, many players already have a basic idea of an elf. They look similar to humans, yet are different enough to provide immersion into the fantasy world. Further, elves are often portrayed idealized, which according to previous research could be a reason for their popularity as well [4, 27]. They are long-lived and were described as inherently magical in the study, all of which could be attributes that made them appealing to newer players.

While several of the more experienced players in our sample still chose an elf, others might be trying to explore and stray away from typical choices—or they might wish to play a class that does not seem to fit the elf well. It is likely that experienced players are more aware of typical combinations or optimization and that they would therefore, be less likely to play, for example, an elf fighter. The results indicate that it is beneficial or appealing to provide choices that players are already familiar with as an entry-friendly option to TTRPGs. It also indicates that experienced players are likely to look for more unusual choices in order to explore new stories and personalities in their role-playing.

6.1.2 Ability Scores. It is interesting to note the differences between assigned ability scores depending on player experience, given that there were no observable differences when it came to class preferences. One possibility is that experienced players are more likely to know how to optimize their characters and choose abilities that are ideal for the class (for example, intelligence is only important for certain classes—such as Wizards, but not that important for others—such as Fighters), while less experienced players might have been likely to choose based on what sounded appealing to them. Another possibility is that the short descriptions for these abilities in the study were not enough to accurately describe the intricacies of the abilities to inexperienced participants. For example, strength was described as important for combat, while dexterity was described as important for agility and stealth. There is a chance that inexperienced players might have tried to create a character that is strong in combat and therefore chose strength, even when playing a class that is able to improve their fighting through dexterity (e.g., the rogue). Similarly, intelligence was described as important for magical abilities, however, some classes can use other abilities such as charisma or wisdom to improve their spells. New players might also not have been aware of the importance of constitution (described as relevant to stamina and hit points) as being important for the survival of any character regardless of the chosen class. Therefore, these findings could be a result of us oversimplifying the ability description for the purpose of making the character creation process quick and comprehensible for participants in the study.

6.1.3 Alignment. Similarly to race and class choices, alignment on the good-evil dimension might be more likely to be determined by player characteristics other than experience. For example, prior work has shown that players who are high in agreeableness and conscientiousness are less likely to choose playing an evil character [11, 33]. However, inexperienced players were, on average, more likely to find lawful characters appealing than experienced players were. This could be because the alignment dimension of lawful to chaotic is more easily misunderstood. Newer players might think that characters who follow the law normally are considered lawful, however, experienced players might be more likely to describe this as neutral (as following the laws is a normal thing to do) and think of lawful in a more extreme way. Lawful in Dungeons & Dragons is not necessarily reduced to following the law (e.g., not stealing). For a character, being lawful could mean never breaking a promise or strictly following the dogma of a deity (even when common sense might suggest a certain situation to be an exception from a rule). It is also possible that more experienced players are less likely to be willing to follow outside rules and are more likely to play characters that provide them with more choices in each situation, which could make them gravitate away from the lawful category.

6.1.4 Character Background, Ideals, Personality, and Flaws. Character backgrounds and ideals, again, might depend more on player
characteristics other than experience. We did not find experience to influence any of these choices. The same can be said about most of the personality choices. Only two traits were associated with player experience. Experienced players were less likely to choose ‘intelligence’ as a relevant character description. This could simply be because less experienced players were more likely to declare intelligence a more important ability to their character. Another option is that intelligence might be an ability that is valued highly in western societies and likely more so than, for example, wisdom or constitution. As such, a possibility is that this is because newer players are slightly more likely to want an idealized character. They were far more likely to say that they want their character to be similar to themselves, and as such it is possible that the participants themselves value intelligence. More experienced players might be more likely to open to exploring different player types without the need for them to have the same strengths and weaknesses that they value in themselves. Experienced players might be more likely to find less or normally intelligent characters to be fun to play—or at least think that there are other strengths that are just as fun as the genius trope. When it comes to flaws, less experienced players were more likely to choose anxious or fearful characters. This trait is ambiguous as it was translated from the study language (German) and could mean both (anxious or fearful) when translated into English. Anxiety is a common mental health problem and the recent Covid-19 pandemic has both increased the prevalence [14] and was detrimental for individuals with social anxiety [15]. It is likely that several participants identified with this trait. However, in the context of a TTRPG, characters are usually heroes that take on dangerous tasks and go on risky adventures. As such, playing a fearful character can be a difficult trait to align with choosing the adventurous lifestyle. Experienced players might be more aware that it can be challenging to play a character that will react to the tasks of the story with fear. While that does not mean that anxious characters could not be fun or interesting to play, it could explain why they are slightly more appealing to less experienced players.

6.2 Goals in Character Creation and Implications

On average, we find that participants were likely to identify with their created character (Mean=3.7). Identification might further increase over time, if they were actually playing the character. There was no correlation between experience and identification. Most players thought that the personality of their character was important (Mean=5) and that they like it when the character has weaknesses as well (Mean=4.9). This shows that TTRPGs in general could be a safe place to explore imperfect characters from a personal, identifying perspective. Furthermore, the character personality is even more important to experienced players, and this is also the case for seeking weaknesses. Experienced players are less likely to report that they would want to play a ‘perfect’ character free of any weaknesses, showing that the hobby might have allowed them to embrace character flaws even more. That experienced players were more likely to state that they would want to take even more flaws in order to get additional character features might be pointing towards character optimization but at the same time it shows that characters likely become more nuanced and both their strengths and weaknesses are more likely to be emphasized by experienced players. Finally, that many experienced players wanted their characters to be different from themselves could point towards them being more open to explore new perspectives, experiencing viewpoints different from their own or even that they seek to immerse themselves in aspects that they might notice in themselves to some degree but might usually suppress (e.g., due to social desirability). These findings indicate potential for using fantasy role-playing games to improve well-being. Future work should explore whether acceptance of flaws in tabletop role-playing characters could assist players with exploring or accepting their own flaws through the safe space provided by the fantasy setting. Previous work has demonstrated that self-acceptance is a functional skill [19], and that perfectionism (not to be confused with striving for excellence) is related to negative health outcomes [19]. Self-acceptance is relevant to happiness and life satisfaction [3] and has several positive outcomes such as longevity [22], a higher likelihood to resolve self-deficits [18], and more experienced harmony in life [13]. Our work highlights a potential to study effects of tabletop role-playing on self-acceptance through embracing flaws in fantasy characters.

6.3 Role-Play and Dramatherapy

The results indicate that TTRPG players change the way they create characters with experience: new players might be more likely to explore the fantasy world through the lens of an idealized version of themselves. Over time, players might wish to change their perspective to that of a character that has little in common with them, which can help to develop empathy [29]. Experts are more likely to understand the importance of flaws for an interesting story and recognize the potential for character growth. While in
dramatherapy thisudge to explore more challenging characters is more likely to be encouraged by a mental health expert [12, 24]. In TTRPGs it seems to be a development that players are likely to go through on their own. Our results provide a basis for further research on how TTRPGs could be fostered self-acceptance by bringing flaws to the table and exploring them in a fantasy world. We note that beginners might be especially likely to project their own shortcomings and strengths onto their first characters, while experienced players might be more interested in understanding perspectives that are unlike their own.

7 LIMITATIONS AND FUTURE WORK

Building on these results about the relationship between TTRPG experience and character preferences, future work could look into how these preferences manifest or the role of self-expression through game materials (e.g., miniature and terrain design, campaign preferences, creating character artworks etc.). Conducting qualitative studies as well as longitudinal observations would be helpful. Qualitative work can provide insights into specific thought-processes during character creation, whereas long-term studies can inform how these thought-processes and preferences change as players become more experienced. There are several limitations to this exploratory study to be addressed in future work. For example, some participants were complete novices and creating TTRPG characters can be a complicated or overwhelming experience for beginners. While we tried to break the process down into a comprehensive multiple-choice questionnaire format, it is not entirely clear to what extent participants understood the impact of the decisions on actual game play. Further, some of our presented flaws might not be perceived as a weakness by every participant (e.g., ‘suspicious’). It would be valuable to manipulate the objective severity of flaws in future work to verify whether players are likely to opt for mild or even ‘pseudo-flaws’. Lastly, player experience is just one factor, and there is not necessarily one point where a player suddenly becomes an expert; personal growth and experience are likely to keep evolving and can depend on individual motivations, which might influence what players perceive as a strength rather than a flaw (e.g., being ‘suspicious’ could mean being cautious and ‘reckless’ could be seen as just another word for ‘brave’).

8 CONCLUSION

Tabletop role-playing games are popular and hold the potential to improve mental well-being. Although there is limited research in this area, existing studies suggest that role-playing is generally beneficial. This study compared novice and experienced players’ character creation choices to explore how role-playing experience can change preferences and perceptions, such as encouraging the acceptance of character flaws. One of our findings was that more experienced players were more likely to embrace flawed characters; our results offer insights into how experience can shape preferences for character creation. Our work can inform future research aimed at designing role-play game-based interventions to enhance mental well-being. Understanding how players want to engage with a medium and how that changes with experience is crucial in order to harness positive effects and use tabletop role-playing games to help players overcome their demons and dragons in the real world.

ACKNOWLEDGMENTS

We thank Julia Schätzle for her invaluable work on this study.

REFERENCES


Received 26 January 2023; revised 20 March 2023; accepted 3 March 2023