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A Virtual View of Occupation: Transactionalism in MMORPGs

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**A Virtual View of Occupation:
Transactionalism in MMORPGs**

By

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A culminating Capstone manuscript submitted to the faculty of Dominican University of
California in partial fulfillment of the requirements for the degree of Master of Science in
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Abstract

To date, most research on massive multiplayer online role-playing games (MMORPGs) has focused on the effects playing MMORPGs has on players' health and wellness. The virtual environment of MMORPGs has yet to be explored as a space where meaningful occupations occur. This qualitative study explored the virtual environment using a transactional perspective in order to define the qualities of virtual worlds, how transactional relationships operate more clearly within these virtual worlds to construct occupational meaning, and subsequently to provide a foundation of qualitative data to support future research including virtual worlds. The sample included six MMORPG players with experience playing either World of Warcraft, RuneScape, or Guild Wars 2. Based on player interviews and participant observation, four themes related to the construction of meaning within online gaming emerged from the data: the gaming environment, the collective occupational experience, the individual occupational experience, and game transactions. Players described how customizable individual experiences as well as the communal nature of gaming motivated their engagement in MMORPGs. The virtual environment was described as providing immersion in place through interaction with other players, environmental items, and engagement in in-game occupations. The following five transactional agents were identified as contributing to the construction of meaning within MMORPGS: the player, the player community, third-party content creators, game industry manufacturers, and developers. These findings provide occupational scientists with an increased understanding of the qualities of virtual environments and how meaning is constructed within virtual occupations for MMORPG players.

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Introduction

Massive multiplayer online role-playing games (MMORPGs) are popular virtual worlds that provide the opportunity for community building, goal achievement, and identity construction. These virtual worlds have become increasingly relevant environments for study as the communities within build intricacy over time and access to the internet becomes more widespread. Virtual worlds can be defined as:

Shared, simulated spaces which are inhabited and shaped by their inhabitants who are represented as avatars. These avatars mediate our experience of this space as we move, interact with objects and interact with others, with whom we construct a shared understanding of the world at that time. (Girvan, 2018, p. 1099)

MMORPGs are currently studied as effectors of change on players' psyches and outcomes within physical worlds. These environments have yet to be studied phenomenologically as transactional agents that transact with players to build meaningful virtual worlds. The purpose of this study is to fill the identified gap in research regarding MMORPG players and game contexts transactionally constructing occupational meaning with the aim to answer the following question: What are the qualities of the transactions between an MMORPG's contextual environment and its players?

Background

Video Gaming

Video gaming is an occupation wherein an individual utilizes physical and mental resources to interact with a specific game's cultural, environmental, and social context while in a virtual plane. The environment of a video game includes the game's play structure, virtual world, cultural expectations, and the avatars of other players. Video gaming can take place individually and include interactions solely with the virtual world and no other players or with players from all over the world using a variety of devices. The common denominator noted between these access modalities is the transaction between player and virtual world, and it is these virtual worlds themselves that require more descriptive research to understand.

Virtual Worlds

There is little scientific consensus on the definition of a virtual world. These definitions generally include the ideas that virtual worlds are “very similar to reality, with real-world rules and real-time actions and communications” (Techopedia, para. 3). Players enact change in these virtual worlds through avatars, which are self-determined figures controlled by players that are used to engage in the virtual world (Gish, 2019). While these virtual worlds do tend to mimic physical world settings, researchers have outlined the value of such worlds existing through the “promise of an alternative reality in which one isn't constrained by one's real life identity” (McIntosh, 2008, p. 203). Many players also report that being in a virtual world can take on internal sensations that mimic those in the physical world, with virtual worlds described as “[allowing] or [compelling] the user to have a sense of being present in an environment other than the one they are actually in, and to interact with that environment” (Schroeder, 1996, p. 25).

One barrier currently present in research is the lack of an evidence-based, clear definition of what a virtual world is. Girvan (2018) mentions that “the ambiguity in the use and understanding of the term *virtual world* limits advancement of research and has the potential to render the term analytically worthless” (p. 66). As such, one aim of this study is to further describe and provide the opportunity to define more clearly what a virtual world includes and can function as.

MMORPGs

This study focuses on the virtual worlds within Massively Multiplayer Online Role-Playing Games (MMORPGs). MMORPGs are multiplayer online games in which millions of users choose to immerse themselves simultaneously in a virtual environment and engage in interactions with other players through avatars (Cole & Griffiths, 2007). In these games, players create personal avatars and are able to participate in social communities, complete quests, earn in-game currency through jobs, and interact with the game environment. According to MMO-Populations.com, as of August 2020 there are 12,046,024 unique players who play the top 20 MMORPGs. The virtual worlds MMORPGs take place in can encompass a wide range of styles often including fantasy, outer space, or mimicking life in the physical world. In MMORPGs, players use their avatars to complete tasks, go on quests, interact with other players, and interact with the virtual environment.

Literature Review

Video games are one of the most popular leisure activities worldwide. In the United States, approximately 59% of all Americans play video games (Ipsos MediaCT, 2014). One of the more popular styles of video games are MMORPGs. Current literature addresses a range of effects that participation in MMORPG gaming can have on players' outcomes in the physical world. The literature on MMORPGs has examined social interactions within the virtual environment related to the effects of gaming on identity construction (Cole & Griffiths, 2007) and players' experiences when engaging in MMORPGs (Hussain & Griffiths, 2009). These worlds and the experiences of players within them are described as displaying a "real world resonance" (McIntosh, 2008, p. 201) that coincides with the ideas of space and place referred to by Hasselkus (2011) in occupational science. However, these virtual environments have not been studied as spaces of interest that meaningful occupations occur in and the transactional relationship of player and game context has yet to be explored.

MMORPGs' Positive Effect on Health and Wellbeing

One primary finding of current research into MMORPGs has been their potential to support the health and wellbeing of players' lives in the physical world. Playing MMORPGs has been described as promoting a sense of community, providing an opportunity for cultural learning, and building greater social engagement through meeting new people and building friendships (Cole & Griffiths, 2007; Hussain & Griffiths, 2009; O'Connor et al., 2015). The virtual world appears predisposed to offer safe spaces that promote wellbeing as the online environment allows players to "express themselves in ways they may not feel comfortable doing in real life because of their appearance, gender, sexuality, age, or other factors" (Cole & Griffiths, 2007, p. 583). Players' ability to receive emotional support is also facilitated by their

comfort in a virtual environment where interactions are not occurring face to face (O'Connor et al., 2015). This identification of MMORPGs as social platforms with inclusive, anonymous environments demonstrates that playing MMORPGs can be therapeutic, often providing players an outlet for self-expression.

Recent findings also focus on the potential for improved outcomes in physical performance following acquired brain injury or neurological damage. Occupational therapists have recognized the therapeutic use of virtual reality as a modality for physical client factor improvement (Aran et al., 2017). Current research notes the therapeutic value of gaming in combination with occupational and physical therapy services to support gains in areas of the brain that “are involved in the formation of the processes of learning and emotions. Recorded benefits include maximizing neuroplastic processes via motor learning and motor recovery” (Keller et. al., 2020, p. 8). As such, participation in MMORPGs has been shown to improve physical performance, neuroplastic processes, and can be used as a valuable therapeutic tool.

MMORPGs and Addiction

Research has highlighted addiction as a factor that affects the health and wellbeing of MMORPG players. In their qualitative study on MMORPG addiction, Beranuy et al. (2012) found that MMORPG addiction resembles qualities present in drug addiction, such as loss of control, guilt from losing control, and a craving when not participating in the addictive behavior. In some cases, MMORPG addiction has resulted in inadequate exercise and sleep as well as the neglect of work, school, and health behaviors, such as missing meals (Hussain & Griffiths, 2009). Utilizing video games as a support system during crisis-like events has been cautioned as having the potential to lead to addiction (Bacchini et al., 2017). Upon finding that players show crisis-like signs in the process of identity formation, researchers suggest that playing games to

facilitate identity formation, while therapeutically useful, can also promote game immersion and has the potential to lead to addiction if inappropriately structured (Bacchini et al., 2017).

Virtual Space and Place

When defining the virtual world and its relevance to occupational science, Hasselkus' foundational ideas of space and place deliver valuable perspectives. Hasselkus (2011) continues to define "space" as a broad environment or location, whereas "place" refers to not a location or site but as a setting in which significant memories are created. Hasselkus (2011) writes that "space and place are aspects of this transactional unit, helping to constitute the meaning and choices of occupation" that "influence people's health and wellbeing" (p. 43). In video gaming, the virtual worlds' cities and biomes can be seen as an environment directly correlating to "space". Meaning ascribed by specific players to certain areas within that space delineate them as "places", such as the dungeon where they conquered their first challenging enemy alongside fellow guild members.

Rowles (1991) advocated for occupational therapists to understand the value of place to their clients, stating that there is an underestimation of the role a person's environment plays in their identity and well-being. In studying elderly individuals, Rowles (1991) found that "the environment had become almost literally a part of the self" (p. 269). For residents who had lived in the same setting for many years the environment held memories grounded in personal history and emotional significance, often becoming a "repository of meaning, a part of the self that is inextricably linked to self-identity" (Rowles, 1991, p. 269). These concepts relate to the virtual environment as MMORPG players often play a specific game for many years of their life and use their relationship with that particular game as a personal identifier.

Placelessness is a term used to describe experiences within a space that holds superficial or casual meaning and interactions and is void of the occupational meaning found in a place (Hasselkus, 2011). Video gamers can feel a greater sense of belonging to their avatar creations and virtual environments than to their physical bodies and their physical environment (Cole & Griffiths, 2007). Placelessness, therefore, can be posited as a state of being while in the “real world” for these players as they may feel greater sense of belonging while participating in their virtual occupations. In full, studying virtual worlds as both spaces and places that support a sense of belonging to virtual communities over time is essential for understanding the occupation of MMORPG playing.

The Gap in Literature

Research identifying qualities of virtual worlds draws many disciplinary perspectives, however occupational scientists have yet to engage with this topic. Virtual worlds have been researched only as therapeutic tools that correlate with outcomes in the physical environment. Viewing virtual worlds exclusively through perspectives that center the physical world represents a failure to view the full scope of these virtual worlds as environments of occupational transaction. Chee et al. (2006) state that the “phenomenological realities of gamers are not clearly distinguishable between their offline and online realities” (p. 169). As such, occupations both internal and external to these virtual worlds exist and are worthy of study.

Hocking (2009) calls for future research in occupational science to generate comprehensive accounts of specific occupations synthesizing occupational perspectives from the participant’s own insight. Hocking (2009) specifically addresses the following aspects of occupation as primed for research: required client factors to participate, the environment where occupation occurs, the meaning occupation holds, functions or outcomes achieved through

occupation, and context. This research study aims to collect data on the virtual environment, the meaning of MMORPG playing, and the transactional context in which this occupation occurs.

Hocking's (2009) call to engage in research that focuses on describing the qualities of occupations themselves also must be considered in this case, as there exists a clear lack of research describing virtual worlds and their function as transactional environments that occupations occur in. With this knowledge, occupational therapists and scientists can better understand these transactions in virtual worlds and how they translate between contexts.

Statement of Purpose

The purpose of this study is to fill the identified gap in research regarding how MMORPG players and game contexts transactionally construct occupational meaning. While understanding video gaming's potential to facilitate recovery, social engagement, identity formation, and addiction is important, the lack of research regarding the qualities of virtual worlds themselves is unsupportive of a comprehensive understanding of this occupation's therapeutic potential and value. The lack of a clear definition for the concept of a virtual world has caused some to suggest that the term itself is well on the way to obsolescence (Girvan, 2018). Without research that informs a scientific understanding of the qualities of a virtual world, researchers' collective understanding and ability to appropriately define these worlds is lacking necessary support.

This study seeks to define the qualities of virtual worlds, how transactional relationships operate more clearly within these virtual worlds to construct meaning, and subsequently to provide a foundation of qualitative data to support future research including virtual worlds. This study seeks to provide the aforementioned data by answering the following research question: what are the qualities of the transactions between an MMORPG's contextual environment and its players?

Theoretical Framework

Within occupational science the relationship between people, environment, and adaptation to environment is commonly analyzed. The theory of transactionalism emerged out of the idea that there is a continuous relationship between person and environment, in which people restructure their context rather than adapt to it (Cutchin & Dickie, 2012). In this sense, rather than operating as separate entities, transactionalism considers these agents of person and environment to be co-defining and co-constitutive (Palmer, 2004; Sullivan, 2001). The narrative guiding occupational research frequently takes an individualist perspective, whereas transactional theorists posit the value of viewing occupation “as extending beyond a single person’s experience to encompass others and the social, physical, and cultural context [that] offers rich opportunities for study” (Dickie, Cutchin & Humphrey, 2006, p. 85).

In the virtual world, game cultures and environments are in constant fluctuation and context restructuring, shaped by the communities that are involved in sustaining each game. This rich opportunity to study community context referenced in transactional theorists’ work then applies directly to the virtual world as its “occupations are functionally integrated with social relationships, cultural contexts, and community actions. These aspects of the transactional whole—the situations that we live—are the root of occupation and meaning” (Cutchin & Dickie, 2012, p. 87). A transactional perspective subsequently will inform the methodology and analysis of this study in an effort to understand the contextual factors and transactions at play in constructing meaning within MMORPGs.

Ethical and Legal Considerations

Prior to commencing research, the study was reviewed and approved by the Dominican University of California, International Review Board (IRB). All participants were informed of the study via an introductory letter informing participants of their right to withdraw from the study at any point and their written consent was obtained. Pseudonyms were used to keep participant identity separate from participant data and participant contact information was stored on a master list only seen by researchers and the faculty advisors.

Methodology

Design

This study utilized a qualitative research design with a phenomenological approach (Carpenter & Suto, 2008). This design was chosen to generate a descriptive data set in an inductive manner that may appropriately capture the transactional factors at play in virtual worlds. The study was conducted remotely throughout the duration of the research timeline. Each phase of the study was conducted via zoom or in game observation. A reason for choosing this setting was for convenience and safety for participants and researchers during a global health crisis. We selected three of the most popular MMORPGs with long-standing influential histories in the MMORPG communities: World of Warcraft, RuneScape, and Guild Wars 2.

Participants

The following inclusion criteria was used when selecting participants: must be 18 years of age or older, play one or more of the MMORPGs of interest, understand and speak conversational English, and have access to Zoom. We utilized purposive and snowball sampling to recruit two players from each game, resulting in six total participants. RuneScape participants withdrew after the participant observation. Data from one of their initial interviews was able to be retained for analysis. In total 4 participants (mean age=26.3) completed all interviews and the focus group with an average play experience of 9.5 years.

Participants	Gender	Age	Ethnicity	Game	Experience
BearHunter	Male (he/him)	22	Caucasian	World of Warcraft	7 years
Zebbie	Male (he/him)	23	Caucasian	World of Warcraft	8 years
Brady	Male (he/him)	27	Caucasian	Guild Wars 2	11 years
Xushin	Male (he/him)	33	South Korean	Guild Wars 2	12 years
Mars	Nonbinary (she/they)	22	Caucasian	RuneScape	10 years

Table 1

Participant Demographics

Data Collection

Phase 1: Semi Structured Interview

In the first stage of research, participants engaged in three semi-structured interviews scheduled for 60 to 90 minutes. Interview questions were crafted from review of transactional literature (Aldrich 2008; Dickie, Cutchin & Humphrey, 2006; Cutchin & Dickie, 2012; Palmer, 2004; Sullivan, 2001), the participant observation sessions, and researchers' firsthand experiences playing MMORPGs. Interviews were held prior to participant observation, once directly after the participant observation session in-game, and at a collaboratively determined time at least 72 hours after the participant observation session. Raw data was transcribed using Otter transcription services and stored using encrypted qualitative data storage software (Dedoose version 8.3.35).

Pseudonyms were used to maintain confidentiality in all stored data. Audio data was stored via the Otter transcription service and coded by all continuing researchers.

Phase 2: Participant Observation

In the second stage of research, participants experienced game play as usual with the exception of participant observation, which involves observation of a group of individuals in their natural environment (Spradley, 1980). One researcher accompanied the participants of each game either individually or while paired with players they routinely play with during a gaming session using Zoom, Discord, or audio sharing software. Participants were instructed to play the game as they normally would with a researcher viewing their screen when available and engaging in natural conversation with the participant. Researchers took field notes and asked follow-up questions during the gaming session where appropriate. These field notes served to inform later interview questions and established an audit trail that other researchers not involved in the observation could utilize to objectively interpret the data by identifying potential biases.

Phase 3: Focus Group

Lastly, researchers held a focus group including all continuing participants to enhance trustworthiness of the findings through member checking. Researchers facilitated a semi-structured discussion during the focus group regarding key themes found to enhance confirmability of the results and ensure they reflect the participant's views. This facilitated accuracy in developing conclusions pertaining to the results found in this study because participants had the opportunity to contribute to renaming, recategorizing, and developing new themes to better reflect their experiences, thereby reducing the influence of researcher bias on study objectivity.

Data Analysis

The data collection was broken into six phases using Braun and Clarke's (2006) thematic analysis. In phase 1, researchers familiarized themselves with the data to obtain a better grasp on the data collected. Phase 2 involved generation of initial codes and the researchers held consensus meetings to discuss code accuracy and objectivity. In Phase 3 researchers searched for themes within the data and collected common words used and phrases. Phase 4 involved reviewing the themes and making sure the themes coincide with the data. Phase 5 involved defining the themes that were identified and grouping them in a common data umbrella. Finally, phase 6 involved conducting a report based on those themes (Braun & Clarke, 2006).

The trustworthiness of the study was facilitated by triangulation of the data, in which follow up interviews enhanced confirmability by allowing participants to clarify and ensure interpretation of the data collected represented their experiences. Researchers also engaged in reflexivity through noting potential biases after participant interviews. The field notes taken during the observation sessions enhanced trustworthiness by providing an audit trail for other researchers to understand the thought process of the interviewer and help identify potential biases. An audit trail was also incorporated by researchers collaborating in forming code trees, in which descriptors for interview excerpts were re-read to ensure proper categorization of themes. This increased trustworthiness because it involved four researchers analyzing the data to ensure appropriate code categorization.

Findings

Data analysis identified a range of transactional factors existing within the occupation of gaming and four themes that addressed the construction of meaning within online gaming: the gaming environment, the collective occupational experience, the individual occupational experience, and game transactions. Each player's unique experience was evident in interview data, though there was general consensus on the collective occupational experience and transactional agents in effect.

Figure 1 Collective Occupation Code Tree

Note. Codes derived from participant data related to the experience of gaming as a collective occupation.

Collective Occupation

In this theme, participants identified the collective nature of gaming as a primary motivator to play and addressed the function of community in third party spaces, game design, and multiplayer dynamics in constructing meaning within collective play. One participant shared about the games' growth due in part to community involvement:

You know, the reason why I play is not for the game itself, it's for the community that's involved in it because it's its own little ecosystem, its own little family. So the game has evolved beyond just... simply mobs NPCs or rural systems or the auction house or something like that. It's actually how you interact with the community, how the community works with each other. That's the true game.

(Xushin)

The collective experience of occupations in these virtual game worlds are then deeply transactional through the described influence of transactions among third party spaces, design by developers, and contributions to and from the community in creating a meaningful game experience.

Figure 2 Individual Occupation

Note: Codes derived from participant data referencing to the individual occupational experience of gaming.

Individual Occupation

The second theme that emerged from this data described the individual occupational experience of gaming (Figure 2), showing that participants appreciated the affordances in the game that allowed players to build identity through the selection of aesthetics, skills, and role-based decisions regarding their in-game avatar and experience personal growth. Participants shared about how playing the game changed their personal life:

“It’s inspired me to take on things that I’ve always wanted to do...to want to have better equipment so I built myself a computer... and I love it and that I gained a new skill from it...I think that as the basis of it all my life would be a lot different because I don’t think I would be as free to be whatever the hell I want” (Mars). Not only did this personal growth and development aid in the players ability to participate in the game, but participants also mentioned the part this played in making relationships with each other more meaningful.

Figure 3 Environments Code Tree

Note. Codes derived from participant data referencing to the virtual environment.

Environments

The third theme that emerged from the data on meaning construction in the virtual world described the virtual environment of each game (Figure 3). The virtual environment was described in the context of items and equipment that exist within it, space that in-game occupations are performed in, and immersion in place. Immersion was described as occurring in well-designed and familiar spaces that took on aspects of place through “the music, the art, the art teams definitely did an amazing job, especially this expansion of just looking at all the different zones and just exploring them” (Zebbie). This participant also mentioned how the scope of the game contributes to creating a meaningful environment:

I love...the vastness of the content you can do. Whether you want to do more casual things that are more relaxing or...high level intense content, there's just this wide variety of things that keep me invested in the game...that RPG open-world aspect that keeps me immersed into the game (Zebbie)

In whole, participants described the virtual environment as providing meaningful spaces for players to engage in occupations, develop relationships, form lasting memories, and become immersed in.

Figure 4 Transactional Agents in MMORPG Virtual Environment

Note. Transactional web including the transactional agents derived from participants' interview data.

Transactions in the Virtual Context

Data in all interviews additionally identified five primary transactional agents operating to construct meaning within MMORPG gaming: the player, the player community, third-party content creators, game industry manufacturers, and developers. Participants described continuous transactional relationships with developers, stating “I am a cog in the rolling machine of Blizzard” (Bearhunter). Participants referenced transactions working to construct meaning in playing through its status as an “aggregate of many players with the flow of incoming and outgoing... you have these artificial communities building up... You’re witnessing a natural evolution of communities marginalizing different ideas and moving to an aggregate that has a natural societal equilibrium” (Xushin). These artificial communities found in gaming were found to be an integral part of constructing meaning through transaction as participants shared that “gaming is a community- gamers help gamers. And that’s something that I think is untouchable...Gaming is, in my opinion at least, something that creates meaning and belonging.

And I guess, for me that's invaluable" (Brady). Based on these findings, the transactional agents that construct meaning in MMORPG playing as an occupation include the player, the game developer and designers of the game environment, game manufacturers, player community, and third-party content creators.

Discussion

These findings identify that meaning in MMORPG playing is constructed by participation in individual game occupations, engagement with collective game occupations, environmental affordances that contribute to immersiveness in place, and transactions amongst the game's web of transactional agents. Players' description of how their unique play style functions within MMORPG gaming as a collective occupation that constructs both self and community was universal across interviews. This embodiment of Kantarsis and Molineaux's (2017) findings on collective occupation equally situate the occupation of gaming as a multidimensional process that maintains the social fabric through informal encounters, shared events, and participation in community organizations. These findings are pertinent to the field of occupational science in that they describe key features of meaning construction in virtual occupations. This data also directly supports the literature that describes MMORPG playing as promoting a sense of community, providing opportunities for cultural learning, and building social engagement (Cole & Griffiths, 2007; Hussain & Griffiths, 2009; O'Connor et al., 2015).

These findings additionally support understanding of transactions through the lens of enacted togetherness. Nyman and Isaksson's (2021) emerging concept of enacted togetherness describes a process of meaning making, evolving from doing occupation, and "negotiating issues of meaning" (p.44) that participants described while sharing their game experience. Enacted togetherness describes community negotiation and belonging to place and as a source of meaning. Our findings contribute to this concept as doing occupation in the virtual environment with quests, guild membership, and third-party community contributions describe this phenomenon directly. The occupational experience of these participants also demonstrated that engagement with this occupation held "real world resonance" as players referred to the way their

gameplay coordinated with and shifted their own personal factors, skills, and participation with other occupations (McIntosh, 2008, p. 201). These findings also speak to the “purpose of transaction” being to “functionally coordinate relations to keep the transactional unit whole and operational, for the benefit of the dimensions that constitute it” as players that held community roles and regular participation in game communities mentioned personal responsibility, they held to the community that bound them to continuing their contribution (Dickie & Cutchin, 2012, p. 90). Players’ status as “participants in an unfinished universe” remains integral to understanding the form and function of meaning construction within virtual environments as, through transactions among player, environment, community, developer, and third-party media, the gaming community constantly evolves and restructures in response to changing contexts (Dickie & Cutchin, 2012, p. 34). These findings address Hocking’s (2009) call for research into the qualities of occupations with a pursuit of comprehensive data on virtual occupations that occur within the game environment and the methods through which meaningful engagement occurs in them.

Limitations and Recommendations

Potential limitations of this research design were the targeted focus of interview questions, small sample size, low diversity of participant demographic factors, and loss of the two RuneScape participants' data through researcher and participant dropout. Potential limitations of this study design also exist in the format of the participant observation sessions. The researchers were only able to participate in fly-on-the-wall participant observation instead of direct play with the participants due to differences in gaming skill between researcher and participant.

To improve upon this study design in future research on the virtual context, researchers recommend that a larger, more diverse sample size of participants be recruited. Additionally, research should be conducted on games with more entry-level accessibility of play to both reduce the limitations present in the participant observation session and to capture a more diverse set of gaming experiences. The financial and skill barriers impacting participation in the MMORPGs studied here may serve to restrict the diversity of players able to participate in subsequent studies. Researchers suggest that, as part of the focus group, data is collected on any consensus or lack of consensus between participants of different games on the features of meaning constructions and transactional agents existing in online social gaming regardless of game choice. This information can serve to help occupational scientists understand issues of occupational injustice in access to the virtual environment that would build on this study's findings regarding meaning construction in virtual occupations.

Conclusion

This study furthers the information known about virtual space and occupation. Guided by transactionalism this study continues to further the understanding of transactions within the MMORPG virtual space. The data in this study demonstrates that the transactions among players, their communities, third party spaces, developers, environments, and the collective and individual aspects of MMORPG playing are important to the overall quality of the occupational experience. All of these as a whole continue to bring players back to the game and the transactions within the virtual world continue to build the identity of the game and the players who play it. This contributes to the identified gap in research on occupations within the virtual space and supports occupational scientists' understanding of the construction of meaning within virtual spaces and the transactional factors contributing to this meaning construction.

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APPENDIX A Introduction Letter

Title: A Virtual View of Occupation: Transactionalism in MMORPGs

Researchers: Alexander Nold, Shasta Rice, Derian Ramos, Amanda Flores, and John Miklos

We are occupational therapy students at Dominican University of California. We are conducting a research project as part of our capstone thesis requirements with supervision by Dr. Karen McCarthy. I am requesting your voluntary participation in our study exploring virtual occupation in MMORPGs and its impact on the community around you.

Before agreeing to participate, we encourage you to read the following explanation of this study. This statement describes the purpose and procedures of the study. Also described is your right to withdraw from the study at any time.

This study has been approved by the Institutional Review Board of Dominican University of California.

Explanation of Procedures

In the first stage of research, participants will experience game play as usual with the exception of participant observation while one researcher accompanies them as another player. In the second stage of research, participants will also experience three semi-structured interviews. Participants will have the option to deny answering any question they are uncomfortable with, request breaks, and reschedule the interview for a later time. Interviews will be held prior to participant observation, once directly after the participant observation session in-game, and at a collaboratively determined time at least 72 hours after the participant observation session. Lastly, researchers will hold optional focus groups of participants and the small groups that they regularly game with in the MMORPGs of interest.

Withdrawal without Prejudice

Participation in this study is voluntary; refusal to participate will involve no penalty. You are free to withdraw consent and discontinue participation in this project at any time without prejudice or penalty. You are also free to refuse to answer any questions on this study.

APPENDIX B Individual Interview 1 Questions

- I. Tell me about the community here when you first started playing this game?
- II. What did social interactions look like when you first started?
- III. What activities did you do when you first started?
- IV. Can you describe a situation experienced within the game that invoked certain emotions
- V. Were there any areas you would go to often or avoid when you first started?
- VI. Tell me about locations on the map that hold particularly impactful memories for you when you first started?
 - A. What do you do there? Tell me about your first experience with that location. Who do you meet there? What emotional responses come up for you in that particular location?
- VII. Did any environmental aspects of the game world strike you as important or challenging?
- VIII. Tell me about what specializations you work towards in the game (classes like healer, tank, fighter, ranger...).
- IX. What makes you return to this particular game?
- X. Tell me about a typical gaming session.
- XI. How do the rules or policies influence the way you play the game?
- XII. How have specific skills gained while playing MMORPGs and/or your in game experiences influenced the way you play? How have those accomplishments had an affect on your participation in in-game society?
- XIII. How does the video game environment and what you do in the game relate to who you are? Over the years as you change as a person have you noticed the game change to reflect your interests?
- XIV. How has playing MMORPGs influenced habits you have developed in your life and how would these habits be changed if you no longer played? How does the game's environment influence habits you have formed in the game?

APPENDIX C Individual Interview 2 Questions

- I. Tell me about this community now that you have been playing (state number of hours they have been playing)?
- II. What are social interactions like now?
- III. What activities are your favorite? Which are your least favorite? Do you gravitate towards or avoid any activities, why?
- IV. Can you describe current situational experiences that are important to your gaming experience?
- V. Are there currently any areas on the map you actively go to or avoid?
- VI. Tell me about locations on the map that hold particularly impactful recent memories for you.
 - A. What do you do there? Tell me about your first experience with that location. Who do you meet there? What emotional responses come up for you in that particular location?
- VII. What environmental aspects of the game world strike you as important or challenging now?

APPENDIX D Individual Interview 3 Questions

- I. How do you see this community changing? How would you like it to change?
- II. What would you like social interactions to be like in the future?
- III. What activities would you like to see changed?
- IV. What experiences keep you playing the game?
- V. What causes you to visit an area more and what deters you from an area?
- VI. Tell me about locations on the map you would like to be more important to you.
- VII. What environmental aspects of the game world strike you as being important or challenging. Has this changed as you have leveled up and continued playing?
- VIII. Tell me about the style of avatar you choose.
 - A. What draws you to them? How do you choose your equipment? Have you changed specializations during your time playing the game/from what and why?
- IX. What makes you return to this particular game?
 - A. What about the graphics style/gameplay/story/built characters and avatars/social norms and culture pulls you back? What is similar about this game and other games you enjoy?
- X. Tell me about a typical gaming session.
 - A. Do you have a particular routine you follow? How do you prepare before logging on? Who do you usually log in with and how do you communicate with them?
- XI. How have specific skills gained while playing MMORPGs and/or your in-game experiences influenced the way you play? How have those accomplishments had an affect on your participation in in-game society?
- XII. How does the video game environment and what you do in the game relate to who you are? Over the years as you change as a person have you noticed the game change to reflect your interests or vice versa?
- XIII. How has playing MMORPGs influenced habits you have developed in your life and how would these habits be changed if you no longer played? How does the game's environment influence habits you have formed in the game?
- XIV. How do the rules or policies influence the way you play the game?
 - A. Does it make it easier/harder for you to play?
 - B. How do unwritten rules dictate the way you play the game?