Emotions at Play:
Assessing Emotional Responses of Teenagers after they play “Papers, Please”

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ABSTRACT

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The purpose of this study was to assess and describe emotional responses of teenagers after playing “Papers, Please”, a game displayed at EMP’s Indie Game Revolution exhibit. Data was collected through interviews with 13 teenagers from EMP’s Youth Advisory Board and Pacific Science Center’s Discovery Corps. With the game’s focus on immigration, teenagers were asked to retrospectively describe the game, what they felt during various points in the game, why they may have felt that way, and if concepts of the game paralleled current social issues. Findings show emotional responses focused on both the mechanics and narrative of the game, although teens that identified as children of immigrants were more susceptible in expressing emotional responses about their personal experiences. This research is intended to extend conversations within the museum field about the potential of using similar games in a museum setting to discuss difficult social issue related topics, like immigration.
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Chapter I: INTRODUCTION

To play is to learn. In museums, play is often associated with children’s museums, it can be seen in science centers, is evident in living history museums, and even art museums utilize play in their interactive kiosks (Bugg, 2011; Allison, 2011). There is acknowledgement that play is integral to our individual growth and education (Huizinga, 1949; Gee, 2003), but some game scholars argue that gaming is different. Games have rules, constraints, and borders (Caillois, 2001) and are very much separate from the reality of life within the context of the game world (Salen & Zimmerman, 2003). In the past several decades, video games have evolved from humble electronics into a multi-billion dollar industry. They are at the forefront of technology and popular culture, and comprise a spectrum of experiences from escapist play (Calleja, 2010), to educational tool (Girard, Ecalle, & Magnan, 2013), to engine for social change (McGonigal, 2011). Consequently, the use of games in museums has subsequently grown, from being objects of our culture in exhibits, to playing games in museum spaces, to game-based learning initiatives, gaming in museums is a trend with no intentions of slowing down (Beale, 2011; Avouris, 2011).

This acceptance and willingness to display, discuss, and learn about video games in an informal setting is creating a precedent for the ways museum professionals incorporate games in museums. However, limited published scholarship is available on the benefits of these interactive technologies in informal settings. Past research with video game effects looked at the increase of aggressive thoughts in youth while playing violent games (Anderson & Ford, 1986; Anderson & Dill, 2000; Greitemeyer, et al., 2010), of desensitization to violence (Bartholow, Bushman, Sestir, 2006; Greitemeyer, et al, 2010) and of emotional responses to a variety of video game genres (Frome, 2007). While game research may never diminish with regards to violence in video
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games, some scholars are looking for a more balanced perspective on the positive potentials of video games. This discourse on the benefits of games comes at an appropriate time as this form of media in the past few years has changed in complexity, diversity, realism, and has grown social in nature (Ferguson & Olson, 2013). And some scholars would claim that these potential benefits have the capacity to create “immersive and compelling social, cognitive, and emotional experiences” (Granic, Lobel, & Engels, 2014, p. 66) for players.

Focusing on the emotional experiences of games, studies have shown that gaming can be one of the most efficient and effective ways positive emotions are generated in youth (Granic, Lobel, & Engels, 2014). McGonigal (2011) also suggested that some of the most intense emotional experiences can be triggered within the context of playing games. Yet there is little literature at present that discusses emotional response or benefits to games discussing topics serious in nature, such as games focused on social issues like immigration, racism, and poverty (Ritterfeld, Cody, & Vorderer, 2009) in a museum setting.

PURPOSE AND SIGNIFICANCE

With the proliferation of independent (indie) games, the definition of what is a game and what is the role of these forms of media in contemporary culture becomes even more diverse and salient. Past research labeled video games as pointless and a ‘waste of time’ (Gee, 2003), but current indie game developers are pushing back against this negative stereotype to create personal works of art, expression, perspective, and even question identity, providing for a rich spectrum of experiences and emotions in video games (McMurray, 2014). For Teddy Diefenbach, game designer and developer, games are a way to understand other places and other experiences in a “deeper and more first-person way than you can with other types of media…games are a way to put conflict and problems in someone else’s hand. If you have a
social problem that you think is important and you want people to understand it, you can explain it to them [through games]” (McMurray, 2014). Lucas Pope, game developer of the popular indie game entitled “Papers, Please,” wanted to create a game about immigration, what ensued was a powerful expression filled with undertones of hopelessness and helplessness. For Pope, the purpose of “Papers, Please” was “to connect players with the difficult decisions an immigration inspector has to make” (Costantini, 2013, par. 6), while focusing on the emotional complexities of a job on the border.

Capitalizing on the emotional potential of “Papers, Please,” this exploratory research assessed and described emotional responses of teenagers after playing “Papers, Please,” a game displayed at the EMP’s Indie Game Revolution exhibit. Findings from this research are intended to extend conversations within the museum field about the potential for other similar games to be used in a museum setting to discuss difficult social issue related topics, like immigration. Three questions guided this research:

1. How and in what ways are teenagers discussing game content and concepts after playing “Papers, Please”?
2. What characteristics or elements of the game encourage an emotional response?
3. In what ways do participant’s roles and choices within the game impact their emotional response?

As the use of games in museums and informal settings continues to expand, museums have the opportunity to intentionally integrate gaming into their existing content in ways that may engage audiences in meaningful ways. (“Focus on museums and games,” n.d; Brockmyer, 2009). This research will add discourse to an emerging discussion of gaming in museums, and examine how the distinction between reality and the game world can often be blurred when
discussing topics related to immigration.
Chapter II: LITERATURE REVIEW

A digital trend is growing momentum in museums, and that is the use and display of video games in an informal setting. From being used as objects of our current popular culture to utilizing game as an avenue of engagement and education, this medium is one in a host of digital technologies being incorporated in museum settings. While a broad range of game studies have focused on both the negatives and positives of playing games, limited research is available on the emotional responses of teenagers after they play games focused on social issues such as immigration, poverty, and even racism. Teenagers, as a demographic that is often cited as being the prolific users and consumers of games, are often the participants of various studies revolved around gaming. Museums as institutions that encourage inquisitive thought and accessibility to all persons regardless of age, should care as more and more museums are interested in methods to engage and entice a teenage audience. While the past decade has seen a growth in museum programming directed at teenage and youth audiences (Schwartz, 2005), recent audience demographics studies in Seattle-based museums show an attendance of teenagers falling below 25% (WISE Consortium, 2014). And this is the case with not merely Seattle-based museums, but museums in general (Wyrick, 2014). In contrast, video games have become a part of “almost all children’s and adolescents’ lives, with 97% playing for at least one hour per day in the United States” (Granic, Lobel, and Engels, 2014). By understanding how teens play and talk about games that focuses on immigration and by exploring emotional responses after gameplay, museum professionals can better understand the potential influences of games and explore how museums may utilize these pre-existing games within their own settings to encourage teenage patronage.

Four areas of literature were significant in informing this study: play as a way of knowing
and understanding the world, Digital Youth and learning, emotional responses as methods of engagement, and current perceptions of gaming in museums. Within those areas of focus, more specific topics are explored and discussed. This literature review is designed to gather information on areas that may influence museum professionals and inform their understanding of games in museums.

WHAT IS A GAME?

For decades, the idea of play as a way of learning has been contested. For some scholars, play is older than culture, and thus older than human society (Huizinga, 1949). To play is an attempt to understand the world, whether that is free play, mimicry, our organized play, it is a form of understanding that surrounds individuals socially, culturally, and critically. It is a mode of engagement and a mode of being human (Sicart, 2014). For others the concept of play is associated as a waste of time, contains a lack of seriousness, and is associated with the juvenile (Rieber, 1996; Gee, 2003, 2005). Play becomes a thing to give up upon when one reaches adulthood (Provost, 1990). Yet even among these contrasting perceptions of play, there are still a limitation when attempting to define “play.” It becomes reduced to a –you’ll know it when you see it—term that is over encompassing and yet without definition, and ultimately does not address games (Caillois, 2001) nor any other subset of play.

But games are different, and somewhat trickier to define, both as a subset of play and containing play within it. For some game historians, games have a twofold structure containing both an ends (an objective) and a means (rules) (Eskelinen, 2001; Salen & Zimmerman, 2003). Other game theorists, philosophers, and scholars also include various parameters not limited to, but including the concept of freedom in the game, a sense of separateness restricted within a limit of space and time, uncertainty of outcome and thus consistently engaging, unproductive,
and including aspects of make-believe (Caillois, 2001; Salen & Zimmerman, 2003). However, despite the various definitions of games, which attempts to limit play experience to rules and other parameters, in no way are games truly separate from the reality of life. They have become cultural objects of our contemporary society and have as much potential to be real in their social and cultural context, as well as through lived experiences in play and through reflection (Zimmerman, 2012).

With the arrival of independent games, the breadth and depth of what constitutes a game is also questioned. Independent games, also referred to as “indies,” do not have a clear and concise definition within the field of game studies or even amongst game designers who create works labeled under “indie.” Often positioned counter-culture to big blockbuster games, indies are discussed through the lens of a social movement, art movement, cultural scene, ethical position, value orientation, form of social identity, declaration of authority, accident, and the list continues (Simon, 2013; Parker, 2013). For some indie game developers, these works of art become personal expressions and an opportunity for multiple voices to express opinions, beliefs, and life experiences through an interactive medium (Anthropy, 2012). As Jake Kazdal, game developer, expresses, “Indie embodies the spirit of creating a game because you want to, not because it’s your job” (McMurray, 2014). With this new approach to video games and the varied forms of expressions that are developed, players have the potential to experience games in a more nuanced manner. For Tracy Fullerton, Director of the USC Game Innovation Lab, she explains that the growth and evolution of games will not be technological advances, but rather depth of content and a maturity of the audience who plays these games (McMurray, 2014).

**LEARNING THROUGH GAMES – ENTICING DIGITAL YOUTH**

The use of video games as technological tools for education has been trending for the
past decade and has increased exponentially within the past several years. Games are used as methods to deliver core lessons like math and reading, and even teach computer programming. They have become methods to keep students engaged and more active while learning and has been successful that entire schools (Malykhina, 2014) and initiatives are beginning to focus on game-based education (IMLS, 2014). The justification behind the use of games in education is often stemmed from the idea that the intended audience matured in a culture immersed by technology, these audiences are often dubbed as digital natives and/or digital youths (Prensky, 2001; Dumbleton & Kirriemuir, 2006; Ito et al., 2008). The development of digital youths who have known the world through both physical and digitally mediated forums has created awareness among educators that learning is taking place in numerous locations and across various mediums (Greenfield, 1984; Dumbleton & Kirriemuir, 2006; Eisenberg, 2014).

Historically, games catered to primarily young audiences. While there is no single explanation for this development, from an economic and industry perspective, numerous popular culture industries see youth as influential forces in and for new markets and products. The gaming industry is no different (Fromme, 2003). This targeted marketing to youth, the growth of technology, and various other forces at play has led to the determined conclusion that “for children and youth, computer games ‘are the most frequently used interactive media,’” (Beentjes et al, qtd. in Fromme, 2003). So pervasive is technology in the lives of youth that recent research reported 97% of teenagers play video games (PEW Internet & American Life Project, 2008; Granic et al., 2014).

The use of digital tools outside a school setting means youth are learning about history through internet searches, understanding systems design through playing games, and these interactions are completed through a very personal and individual level, tailored to the interests
and abilities of the user, and instigated by the user (Squire, 2011). Users of video games have developed academic interests and learned academic content through games, regardless of whether or not the games were designed for education. Games are also deeply engaging for those who play them, encouraging an interest in not only the game in and of itself, but encouraging learning of content revolving around history, science, language learning (Steinkuehler & Squire, 2014) and of understanding and experiencing the world in new ways (Gee, 2003). Playing thus becomes an implication for active learning (Jones, 1997) and “experiencing the world in new ways, forming new affiliations and preparing for future learning” (Gee, 2003, p. 23).

EMOTIONS AND GAMES

However, as learning through video games continues to be discussed, certain scholars argue that in order to fully understand the potential of video games on youth, a more balanced perspective is needed that explores video games social and emotional benefits, both negative and positive, on its users. This call for research becomes important in part because video games, as discussed with the concept of indie games, have changed in the past several years, “becoming increasingly complex, diverse, realistic and social in nature,” (Ferguson & Olson, 2013 qtd. in Granic et al., 2014).

Play affords users to experiment with social experiences and encourages various emotional responses in a safe and separate atmosphere (Erikson, 1977) from the real world. Some scholars posited the idea that play in games provides an emotional context where themes of power and agency, aggression, nurturance, anxiety, pain, loss, growth, and joy can be experienced productively (Grottman, 1986; Granic et al., 2014). It is also discussed that some of the most intense emotional experiences have the potential to be triggered in the context of playing video games (McGonigal, 2011).
Yet the notion of emotional response in video games is highly ambiguous and very subjective to the individual engaged with the specific game. There are a variety of ways to discuss and classify emotions in general. Ekman offers six basic emotions that all individuals experience—joy, sadness, disgust, fear, surprise, interest, and contempt (Frome, 2007). Other classifications focus on positive or negative emotional responses, also known as valence (Ortony et al., 1990) and Frome (2007) focuses on two structures that are common when discussing emotional responses to video games known as game emotions and narrative emotions. Game emotions “are emotions generated due to winning, losing, accomplishment, and frustration… game emotions are directly related to your performance” (p. 832) in the game. In contrast, narrative emotions are elicited through various forms of media, including art, film, and video games. Narrative emotions derive from some connection or response to a video game’s characters, events, and setting. And lastly, Tavinor (2009) provides the idea of “suspension of belief” where the player, in a moment of play, no longer recognizes they are playing a game and the emotions that are elicited are real and authentic as if the player were experiencing these emotions in the reality.

So why do emotions matter? They matter because nearly all developers are interested in video games’ ability to evoke emotions in players. Developers want to make videogames that make the public feel something of greater emotional depth (Stark, 2014), educators want to engage students in learning, and researchers want to understand motivations of play (Bowen, n.d.). For Jenova Chen, game developer and founder of thatgamecompany, “games have more meaning than just pleasure, or just a moment of escape. There is more power in these games when you are doing it right. I think certain types of feeling can heal and change people, can make lives better” (Stark, 2014, par. 11). Although Ian Bogost (2011) calls for the need of more
emotional experiences to elicit empathy, little research or experimentation has been conducted on truly elevating the emotional experiences of games. For Bogost, emotional connections with the narrative, the characters, or the experiences can provide powerful conduits for experiencing empathy.

**GAMING IN MUSEUMS**

Museums as informal learning spaces become prime locations to implement game-based learning, whether that game was created to be educational or even if it is a pure game being utilized in a museum space. As Dumbleton & Kirriemuir (2006) state, “It is important to consider that education is not an activity confined to schools. Learning occurs at the home, in work, and more implicitly, in activities such as those of a social nature” (p. 225), however, present use of games in non-profit institutions is often ambiguous. Current research of museum games use the term loosely with it generally encompassing many themes such as interactivity, curiosity, challenge, cooperation, choice, creativity, discovery, and even failure, with the acknowledgement that games can link these forms of engagement in unique ways (Beale, 2011). Understanding that museums play an important role as sites of informal learning, and the explosion of games in modern culture, games have become the solution by which to engage young and technologically savvy visitors. In the past five years, with the exponential growth of games in museums, exhibit developers, program educators, and external game designers have recognized the impact games can have on the public in an informal learning environment (Beale, 2011). In an American Alliance of Museum’s (AAM) talk, Jane McGonigal (2009), game designer and proponent of games for change, stated that museum professionals “have all this pent-up knowledge in museums, all this pent-up expertise, and all these collections designed to inspire people together…” (par. 22) and games can become the medium by which to inspire, to
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educate, to engage, and ultimately to make the public happy.

Ed Rodley, an exhibit developer with over twenty years experience at the Museum of Science in Boston, noted the success of games is often attributed to its ‘fun’ factor. He elaborated that games in museums often have an ‘educational’ endeavor, which can hinder the level of success for a game. He says it “[s]eems like a no-brainer, but as you know, so many “educational” games are educational first and games second (if at all). They’re usually gamified (ack) interactives, and they usually suck. If it’s going to be a game, it has to be game first” (“Focus on museums and games,” n.d.). Jordan Shapiro, game designer, author and editor, admits that educational technology is interesting and exciting, but he cautions educators and learning institutions to choose technological tools that are impactful, not because they are new or because they are an emerging trend. Games-based learning, although useful in encouraging play in youth, must also be used carefully as technology is not neutral and has the ability to educate users without intentionality (Shapiro, 2014). These sentiments are unique within the field of museums as discussion has yet to be broached by museum professionals employing gaming as an avenue of engagement. These caveats open avenues of inquiry and dialogue as to what are the benefits of gaming beyond education, and what would interactives that are games first and educational look like in a museum setting?

Across both informal and formal learning spaces, the incorporation of game-based learning has piqued the interest of not only museums and schools, but funders like the Institute for Museum and Library Services (IMLS) and the National Science Foundation (NSF). Funders recognize that video games have surpassed the confinements of mere entertainment to become tools of engagement and relevance (IMLS, 2014), and this has resulted in many institutions pursuing various video game based initiatives. And museum practitioners readily agree that
video games have the potential to create “more intuitive learning opportunities than textbooks and exhibits” (Allison qtd. in Beale, 2011, p. 36).

But video games can be used for more than just content-based learning. These mediums, as discussed earlier, have the capacity to engage players in profound emotional moments and museums are well positioned to explore such endeavors through the context of immigration. This past year, the AAM conference had a focus on the social value of museums. With this theme at the forefront of the conference, the concept of museums championing social change and tackling major upheavals in contemporary society means now is the time to explore the role of technology in museums. Museums are recognized in the field as being vehicles of engagement. These institutions provide immersive, personal experiences (Nilsen, Shulman Herz, & Bader, 2015), not unlike video games. As David Schaller, founder of eduweb stated, “To wrestle with this provocative idea, we must examine the evidence, understand what works, and build on that… There are wonderful reviews, insightful commentary, and impressive player statistics; we all likely agree that the current trajectory of serious games holds great potential. Now is the time to figure out what works, to move forward from exciting claims to real understanding about how games can instigate change” (qtd. in Beale, 2011). Now is the time to explore social issues, and now is the time to evaluate the role of video games in museums and assess the capacity by which these tools can teach tolerance and freedom, create a respect for cultural differences, explore a sense of identity, empower through knowledge and understanding, and create awareness to the world, each other, and the personal experiences that comprise a person (AAM, 2015). Perhaps this can be done through emotional responses to social issues.

While this study only looked at a specific game and its capacity to evoke emotional responses in youth, findings will add new context in how video games may be used in museums.
By understanding how youth discuss game content and understanding which elements of the game encourage emotional responses after playing a game, museums may be better equipped to explore if and how these types of tools can be used in an informal setting to engage youth in exploring complex social issues.
Chapter III: METHODOLOGY

STATEMENT OF PURPOSE

The purpose of this research is to assess and describe the emotional responses of teenagers after they play “Papers, Please,” a game displayed at the EMP’s Indie Game Revolution exhibit. In order to achieve this outcome, data was collected through a mixed methods approach.

Participants

Participants of this study were recruited from the Youth Advisory Board of the EMP Museum and the Discovery Corp of Pacific Science Center, both based in Seattle, Washington. Past work done by Nina Simon (2010) expressed that when it comes to socializing with strangers, teenage interest and participation is low. Understanding the discussion of emotions and feelings would potentially make any form of dialogue even more difficult, this study allowed teens to participate either individually, in pairs, or triads, dependent on their comfort level. Participants were given the opportunity to choose pseudonyms to ensure anonymity in the analysis of their emotional responses to “Papers, Please”. All data collection took place in the participants’ own respective museums in order to provide a space where teenagers could “hang out” with their friend(s), play a video game, and converse after gameplay (Ito et al., 2008). A total of thirteen teenagers were interviewed for this study.

METHODS

Recognizing the work of Falk and Gillespie (2009) in their research on the role of emotion in science center visitor learning, this research attempted to replicate their methods of
utilizing the Russell Affect Grid as a descriptive means to discuss emotional self-reports of teenagers, as well as implementing a semi-structured interview post-gameplay. The Russell Affect Grid was utilized through a one-group pre- and post-gameplay self-assessment. All interviews were conducted post-gameplay.

INSTRUMENTS

The Affect Grid is a nine-point scale measuring two dimensions of emotion: pleasure - displeasure (valence) and high arousal - sleepiness (arousal)(Russell, 1989). The Affect Grid “was designed to record judgments about single instances of affect” (p. 493). Following the methods, this study used the modified instrument altered by Falk and Gillespie (2009) to measure the emotional status of teenagers at a particular moment. Modifications included simplification of text on the grid and the addition of a brief description of the meaning of the two axes and how to properly mark and interpret the instrument. After the introduction and description of the instrument, and followed by a practice self-report, participants in this study were asked to place an “x” in the grid where they perceived their emotional status fell. Participants were asked to complete a self-report prior to playing “Papers, Please,” and once again after playing the game providing data for pre- and post-reports. Following the pre-report of emotional status, participants played “Papers, Please” for 20-25 minutes before being stopped.

Using this setting, participants were provided five minutes of exploratory observation in the game, allowing for mechanism understanding (i.e. knowing what buttons to push, what is expected of the player from a game playing perspective). This study limited gameplay to 20-25 minutes to ensure proper understanding of the game, allowing for understanding of the narrative, and following similar game studies protocols of gameplay time limitations (Birchall and Henson, 2011; Gentile et al, 2009). After gameplay and the completion of the self-report Russell Affect
Grid, teenagers participated in semi-structured interviews. Interview questions were influenced by the methods of Falk and Gillespie (2009) and included having participants recount the narrative of the game prior to discussing their emotions. Interviews were audio recorded and designed to be completed in 30-45 minutes. All interviews were administered in a conversational tone as this method is considered to be “the least threatening way of conducting interviews…[and] can be a valuable tool for probing a subject’s feelings” (Diamond, 1999, p. 87). Recognizing the subjective nature of this study and the focus of emotions in youth, the interviews and discussions attempted to avoid the pitfalls of using a standardized definition with regards to speaking about what emotions the participants were feelings, and allowed the participants to tell their reaction and responses of the game through their own interpretations (Niederhoffer and Pennebaker, 2009).

In order to leave interviews as unbiased as possible, the intent behind the creation of the game or the description of the game were withheld, allowing participants to define and describe the game as they chose. Participants were also asked to retrospectively describe what they thought the games’ focus was prior to gameplay, what they felt at various points of the game, describe why they may have felt that way, and if concepts of the game parallel movements or issues in current society.

ANALYSIS

Data acquired through the self-report Russell affect grid were scored as two nine-point Likert-type scales, with one score for valence and another for arousal. All data was initially entered in a Microsoft Excel spreadsheet and imported into IBM SPSS software. Through this method, averages for both pre- and post-reports were analyzed as supplementary to the semi-structured interviews.
All commentary during gameplay, as well as each participant’s responses to the interview questions were transcribed into Microsoft Word documents and then imported into the qualitative data research software, NVivo. Using this software, reoccurring themes and keywords from the interviews were coded, through which trends in discussion and emotional responses were identified and discussed.

LIMITATIONS

The research and analysis of emotion assessment in games provides challenges depending on the methodology used for data collection. The use of both predictive inference (top-down such as tests or subjective questionnaires) and diagnostic inference (bottom-up such as physiological or behavioral measurements like eye movement) method approaches improve emotion recognition accuracy (Ifenthaler, Eseryel, & Ge, 2012). However, understanding that diagnostic inference would not be possible due to the length of time needed for this type of research, it was decided that an assessment and descriptive approach to research would be more beneficial in exploring emotional responses of youth in a museum setting. As this study is also considered exploratory in nature, limitations on sample size influenced quantitative analyses of the data.
Chapter IV: RESULTS & DISCUSSION

INTRODUCTION

The results of this study are summarized and further implications discussed in this chapter. All interview questions were analyzed and grouped into themes. Those themes are elaborated upon under the three guiding research questions of this study. The game “Papers, Please” is described in order to provide context for the findings and all participants of the study are referred by their chosen pseudonyms for anonymity purposes.

PLAYING WITH IMMIGRATION

The narrative of “Papers, Please” is set in the fictional world of Soviet-like Arstozka in 1982 where the player takes on the role of an immigration official responsible for the traffic in between Arstozka and the recently annexed neighboring country of Kolechia. While the initial premise of the game seems simple, controlling who crosses the border, societal issues of the Cold War atmosphere begins to creep into the narrative forcing players to either honor morality and be punished, allow for human trafficking, face fears of terrorism, all while attempting to make enough credits to keep the border inspector’s family fed. With a variety of choices the player can perform, over twenty possible endings can be provided ranging from the success of maintaining a clear border-control record (as determined by the government), to imprisonment in a work camp, to even death (Cobbett, 2013). “Papers, Please” was created by Pope as an opinionated statement in reaction to contemporary issues of immigration and as an expression of personal experience, albeit the game is set in a fictional world. However, with the focus on social realism, it is difficult to separate the world of Arstozka from the recent past of the very real Cold War and the current conversations revolving around immigration in the United States.
RESEARCH QUESTION 1: DISCUSSING GAME CONTENT AND CONCEPTS OF “PAPERS, PLEASE”

MECHANICS AND NARRATIVE

When discussing emotions in games, two concepts are often discussed or implied, and those are game emotions (emotions revolving around mechanisms of the game) and narrative emotions (emotions revolving around the story the game). For all thirteen teenagers involved in this study, the concept of the game became clear in that “Papers, Please” focused on ideas of immigration and border control. In some fashion or another, teenagers fixated on their role as the border inspector in the game and often discussed the daily occurrences of their “work day.” As Yaan explained the concept of the game:

So my job was to take in people’s papers and their passports into a country that just opened its borders up. And I either had to deny them or approve their passport depending on each level, kind of went from entry ticket to permit to identity card.

As the teens continued to describe the content of the “Papers, Please,” they themselves, unbeknownst to game theory or the literature surrounding game and narrative emotions, also divided their exploration of gameplay into the two camps. Their conversations around emotional responses revolved around these two ideas, which was consistent throughout all aspects of these findings.

For some teenagers, these mechanics of the game—understanding what to do, the rules of the technology (i.e. click here, move that), and the objective of the game (letting the right people into the country)—rather than the narrative became more influential to their gameplay experience. For these teenagers, the requirement of being the border inspector included much thought, precision, and proved difficult at times. Sprite described “Papers, Please” as an
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“attention game, where you have to pay attention and see if their passport matches their identity and who they are and you have to question it…and it’s up to you, so it’s all in your hands…”

Teens that had similar descriptions of the game gave clear, concise, steps of what they did during gameplay and the repercussions of their actions through their recount of the game. For some teens, immediate reactions to the pressure of the game and its rules became evident early in the conversations. For Johnny, “Papers, Please” “was a very stressful game. You had to get approved by the government, and if you didn’t, you get an infraction of five dollars a.k.a. five credits. And it sucks.” Taevioen emphasized their concept of the game as having “[o]verwhelming odds of the amount of work to be done,” while Jenkins often claimed she felt powerless and consumed while playing.

In contrast to the focus of the game mechanics, a few teens focused on the narrative of the game, including comments that discussed family, the terrorist threat the player experienced as a border inspector, and even spoke of analogous scenarios of real-life situations that paralleled events in the game. Yaan examined the idea that everything had to be in order and lined up perfectly. I never understood how hard that actually is. And now I’m like ok, those jobs are really hard and they, you, you can get killed for that, and now my children and my wife and my in-laws were starving and sick…It reminded me a lot of the whole East Berlin/West Berlin thing, it was after World War II and when the country was split up, and Germany was split up…

Juneau likened “Papers, Please” to the “TSA in a country somewhat like the Soviet Union…There’s serious regulations on everything so it’s very strict.” For Malcolm X, the ideas and content behind “Papers, Please” were very real and authentic. He elaborated, “I think this stuff, it happened, this happened in real life. It happens in real life like back in the day probably. People trying to illegally come to countries and stuff.”

“I DIDN’T EXPECT IT TO BE THE COMPLETE OPPOSITE OF MOST [GAMES]”
For all thirteen teenagers, “Papers, Please” was a clear delineation from the games they played during their own pastime. All teenagers in the study had misconceptions about what they thought the game would resemble. Three youth thought the game would focus around paper airplanes, one thought the game would be similar to a Mario game, another like Pac-Man, and the rest did not have preconceived ideas of what the game or the narrative would entail. Yet each of them made remarks that they did not expect a game “like that”. In the interview with Sprite, he made a comment that succinctly echoed many of the remarks of his peers. He stated, “The title was like “Papers, Please,” so I was thinking it would be like not, that. I wasn’t thinking it was going to be a game where you ask someone for a passport…you check it out ‘cause you don’t really hear about games like that in like today’s era…” And to a degree, Sprite was correct. Traditionally, games created for audiences focused on the idea of “fun” to engage their consumers. “Papers, Please,” as an indie game, is a game that is different from that, and these teenagers experienced this first hand. Lisa and Sage, who played the game together, discussed the concept of catharsis in games during their interview. Within their conversation, catharsis was defined as a form of liberation from reality, and while they acknowledged that games have the capacity to make one feel something, “Papers, Please” did not allow their attention to be freed from their actions in the game, despite the game’s repetitive nature. Instead, these teens were forced through gameplay to make decisions and be aware of those decisions. They said:

Lisa: Well, most games have some sort of, I don’t if catharsis is the right word, but they want to make you think about something or feel something, and this game definitely put me in a position that I didn’t want to be in…So yeah, it was interesting. The objective or like the purpose of the game, I think mostly just trying to put you in a position of having to follow rules even when you don’t completely feel comfortable with it. I guess.

Sage: …I think you’re right, the point of games is to be cathartic. And I think like, this wasn’t at all, just because I, it’s the same thing about like, we would just follow the rules each time so to me, it wasn’t like a real action or wasn’t something that was distracting from my thoughts or anything like that just because it was so monotonous. But I think
there must be like some element of social commentary or something to it otherwise, like, like there must be more to it than just like stamping passports.

Yaan, who was familiar with the concept of indie games identified “Papers, Please” as different from most games and recognized the actions during gameplay would need some form of mindful effort. Yaan’s familiarity with indie games did not hinder or help them, and similar to the remaining teens, also voiced various opinions of the game and referenced the experience as unpleasant.

**RESEARCH QUESTION 2: EMOTIONAL RESPONSES TO “PAPERS, PLEASE”**

**PROMINENT MOMENTS IN GAMEPLAY**

For some teenagers, aspects of prostitution, human trafficking, oppression and terrorism became the most salient aspects of the game narrative, creating an environment described as gross, unpleasant, and weird. Johnny remarked that the area “seemed like it was a hotspot for terrorists. I noticed that every couple minutes a terrorist wanted to kill them.” Two teenagers also likened the oppressive state of the game to a Hitler-like Germany. For others, the aesthetics (music and artistic style) of the game became the element that influenced their gameplay, often discussing the music for setting the desolate and intense mood of the game and the somber color palette for enforcing an oppressive atmosphere. One teen even related the game to drowning. He said he felt as if he was “in the ocean or something, and you had weights on you that so you could swim up just to enough, just to get one breath of air, but then you keep going down, down, down further…”

For three teens, their commitment to the rules of the game and following directions was also hindered by the need for detail in their decisions. Mistakes in gameplay often turned into government infractions and penalty costs and despite the players’ commitment to the mechanics
of the game, discussions around narrative and emotional responses slowly developed within the conversations. Sam explained that the “fact you made so little money, but you still had to support your family and stuff, like that kind of stood out to me…It’s a lot to take in and try to support someone on top of doing all that, it just got stressful.” and Steve remarked that he had to be…

…more vigilant on discrepancies because I guess, I make money off of doing that and if I didn’t do well I lost my job and got arrested. I would say maybe like, I had my family involved or like the player, and he had a family involved…and then I’m like ok, why did they (the developers) choose a family instead of like they could, the person could have been alone, or with maybe a girlfriend or some kind of spouse, or even a pet. But they chose a family out of all things, which is more responsibility. And shows that you have a relationship with more than one person…

For three teens, the fact that “Papers, Please” was a game also limited the types of emotions they experienced. What reactions they did have were often due to game mechanics, including making the right choice, making the choice quickly enough, and making the choice perfectly without any infractions, and thus the emotional responses they encountered were limited to frustration, confusion, stress, and anger at the system of the game rather than the narrative. These responses were often directed at lack of instruction on behalf of the game, too much text and therefore too much reading, and anger at oneself for the lack of attention to the game. Perhaps this “it’s just a game” mentality hindered these teenagers from taking a deeper view into the narrative, or perhaps prevalent exposure to video games also desensitized teenagers from taking anything of value from a game, other than entertainment. As G. Herbo stated:

At first I was frustrated ‘cause I kept getting those ticket things and I didn't know what to do…but once I figured it out, it was just back to casual…I was kind of like nonchalant. I was just playing a game, but I didn't treat it like any more serious or less than... It's just a game. Like games are meant to be played. They're for fun, so. I don't make it more serious than it has to be.

However, for a handful of teenagers, “Papers, Please” became more than a game. It became an avenue to talk about their personal experiences with immigration.
**IMMIGRATION AS A PERSONAL EXPERIENCE**

For one individual in particular, an instant personal connection between the narrative and their personal experience became evident before any concept of emotional response was discussed. They drew on their own heritage as a child of an Austrian immigrant to help make sense of the game. They said, “I am Austrian-American so I’ve had my family tell me about this stuff and just kind of playing it and even though it’s a fictional world, the game still for me has this odd, not exactly like an appeal, but I’m drawn to it.” And they were not alone. As conversations in each interview focused on the various elements of the game and began introducing the topic of emotions and feelings while playing, it became very clear which teenagers identified as children of immigrants, as they made very poignant remarks about their own experiences with immigration.

Lisa and Sage also identified as first-generation Americans born in the United States. Although Sage initially credited the repetitive nature of the game as the reason for her boredom, she began to steer the conversation away from her emotions on the game and began focusing more on her personal experience, her parents’ experiences, and the effect it had while travelling in a post-9/11 world. She mentioned that as she was playing the game:

…the first thing I thought of was the date, 1982. I think, I don't know when my parents immigrated here, but it was sometime in the 80s…Yeah. So, it's funny that we're on the other side. Like both of us are immigrant children and we're on the other side of that. That was the first thing I thought of…I guess it’s a little nuanced ‘cause post 9/11 era and I look pretty like, like I look kind of Middle Eastern so, that’s kind of a weird thing. [W]e would get stopped at airports a lot, like my dad, like every single time will get probably checked, like it was really bad for a while. Now it’s not as bad, but like before, it was pretty bad.

Lisa related “Papers, Please” with a family trip to Canada. In Lisa’s interpretation, the fact that her mother was not of the white or Caucasian race meant that she was susceptible to inspection by security and although she said she herself never experienced any form of prejudice, the
prejudice against her parents was very resonant in her mind. In her words:

I actually had a recent, we went to Canada over mid-winter break and when we were crossing the border to come on back from Canada into the U.S., U.S. going into Canada it's a breeze, like they don't generally, it's totally fine. But Canada coming back to the U.S., this has never happened to any of us before, actually it happened to my mom, but I've never experienced it, but they asked if we had food, and we said yes and they ended up having to search our entire car and I understand that it's like, that's a standard procedure, but if my mom was a U.S. citizen and if she was white, they probably wouldn't have suspected anything…but we ended having to wait the immigration office, or not the immigration office, the border security place for a while. And they were just very rude, and it was just a weird experience…trying to prove yourself …

Lisa continued to express how her father was also a victim of prejudice while in another country, because he looked different, had cancer and was therefore carrying medicine in an airport. She recalled having her family stopped, and her father searched because of his condition, and even through her interpretation, questioned the process of immigration in the U.S. She stated, “…it kind of makes you think about, the difference between us and them, the U.S. and you know, everywhere else and how strict the U.S. is about immigration and things like that.”

GAMING AS SOCIAL COMMENTARY

Although the majority of all teens did not identify as children of immigrants, two teenagers claimed they felt as if they were playing with a statement, whether that was a political point interpreted from the game or a social commentary they felt was being expressed. Jenkins even expressed that she felt like she was no longer playing with a game and instead was interacting with a simulation, and to some extent the game was teaching her about immigration. She said:

I feel like it's kind of, more of like a representation than a like, I didn't really feel like I was playing a game, I feel like I was interacting with a…sim...Interacting with like a point. Like it was teaching me, but I wasn't playing. I don't know if that makes sense. Like it seemed really clear to me that what I was looking at was like making a point to me over and over again and not necessarily that like I had anything to do with what, what it was doing. Like I said, like having no impact on what goes on.
RESEARCH QUESTION 3: PARTICIPANT’S ROLES AND CHOICES IN “PAPERS, PLEASE”

AGENCY IN “PAPERS, PLEASE” (OR LACK THEREOF)

Games are unique in their form of engagement, as they often have the capacity to encourage agency and offer feelings of empowerment to its players. As teenagers were asked what it felt like to be able to decide who was able to cross the border into the fictional world of Arstotzka, four major themes developed. These themes revolved around the feeling of power and satisfaction in following the rules, the desire to break the rules of the game, the feeling of disempowerment in the game, and the concept of family and personal experiences.

Three teenagers who maintained their connection to the mechanics of the game felt as if they were just following rules. They explained their method of approving and denying people was based on the instructions of the game, and any form of defiance or of breaking the rules often meant penalties. Through their understanding, infractions and penalties equated to losing. G. Herbo stated:

I like order in a way. In a way I do what I want, I don't really like being told to do like, I like ordering things and to be organized, not have to process things on the fly…I find it easier when I just like, when I'm given an objective, I find it easier to go obtain.

For Sprite, choosing who was allowed to go in Arstotzka provided a sense of power and a sense of agency. He had the choice to approve and deny passports, which satisfied his role as the player. He stated that “Papers, Please” made him feel, “…as if I had a source of power, which is kind of like, good because people play games and they want to have that power because you're in a world that you control.” But even Sprite, as he continued discussing his ideas of power in “Papers, Please” explored the idea that his limited experience with power in the game was clouted by the need to pay for rent, food, water, and provide care for a fictional family.
One teen who felt constricted by the lack of choices in the game attempted to “prompt some response from the computer,” by making choices not based on the rules of the game but rather because she wanted her own agency. And there were other teens who were so disturbed by the confinements of the rules, they felt as if whatever choice they made, the decision was already predetermined, regardless of whether they felt for a character in the game, whether they wanted to spend their money as they saw fit, or wanted to make a difference. It was also through this anger and frustration at the game that Johnny began relating the game to his perceptions of his reality in the United States. He said:

I felt Pissed off. Pissed off, but then, well because I don't know, I like to feel like I can control something and not be told what to do. Like, that's how you work, but I feel I want a little bit more freedom and it makes me upset because it's like I know this is happening in the world, and it's like, it's not fair. I mean, U.S. isn't perfect, but we get almost freedom. Somewhat.

For three teenagers, the idea of family and personal experiences within the context of the game became influential forces in the decisions they made while playing. Not surprisingly, these three teens had previously identified as children of immigrants. These teens discussed the idea that family is important, regardless of the parameters of “Papers, Please.” Yaan explained their reasoning behind their gameplay decisions:

…I was the one allowing people to go through, it’s a really big moment for some people, they were like waiting to get over that border, and it's my job. And yah, I got paid a penalty if I got it wrong,…but I'd rather just let people go through and have my penalty be on me, ‘cause like letting five people go through to visit family is a lot more important than me surviving.

Interestingly, these youth also positioned themselves in the role of the border inspector, exploring the idea of potentially having to refuse their own parents from entering into the United States. Lisa expressed her thoughts in a profound way as she said,

…I was thinking during the game, like oh what if this is a real-life situation? And it's really hard to detach yourself from a job like that just because you know, we were both
immigrant children, so like we're thinking about, oh what if this was our parents and we had to deny our parents from you know, coming into the U.S. or something. And I don't know, it's just very...trying to think of an emotion that I felt...it's just kind of strange and not, I just felt bad the entire time. It makes like a separation between like us and them.

**RELATING “PAPERS, PLEASE” TO REALITY**

Despite whether teens were emotionally engaged through the mechanics or the narrative of “Papers, Please,” all teens were able to relate the game to some aspect of the real world, whether that was through personal experiences or through trends they felt were currently unfolding in society. Several teens likened “Papers, Please” to current day Russia and North Korea. Although these youth adamantly admitted they didn’t watch the news, they also said they heard about the conditions of these two countries and the ways they treated their neighboring countries, their association with communism, and thus their interpretation of these countries in relation to the game. Two teens discussed classmates at their respective school, focusing on the lack of awareness when their peers discussed concepts of race and immigration. And yet another teen discussed the current strife between Palestine and Israel, focusing on the forced removal of Palestinians in Israel. In his interpretation of “Papers, Please” to this issue he said:

My opinion of the issue with Palestine and Israel, I think Palestinians are the victims no matter what. I don’t care way anybody says, it’s just like their people being pushed out of their country and now they just have two little strips of land, so it kind of makes me feel...I know people in Palestine, some of them live in Israel and they fought hard to get there, so that kind of reminded me of it ‘cause you know you can get denied…

Lastly, two teenagers discussed the overall idea of immigration in the United States and the prejudice that often ensues in such situations. Of these two teens, one never discussed the concept of identity. However, after playing “Papers, Please,” he expressed his ideas of current forms of segregation in the U.S. and traveling to Canada. He mentioned the game made him think about first impression decisions and the idea that every person makes these judgements. In contrast, one youth did identify as Indian-American. She elaborated on her experience when
traveling abroad to visit family, recalling moments when her family would be interrogated for being different and for being judged. She said “they always check our passports and they look at our face and ask us questions like about where are you going, what are you doing and it was an interrogation thing there too…” This duality of experiences between the two teens was unique, although they never met and participated in this study in separate interviews. These youth were able to provide singular perceptions around the ideas of prejudice. Although they referenced similar concepts, one teenager reflected on her personal experience, while the other reflected on the same ideas although in a less personal way, providing an insightful interpretation around prejudices as they relate to these teen participants.

A QUANTITATIVE APPROACH TO EMOTIONS

Although many teens who participated in the study often referenced the gameplay of “Papers, Please” as boring, repetitive, and monotonous, the interviews that took place after playing the game all implied that these teens took some meaningful interpretation from the game. Whether these youth discussed their profound personal experiences as a child of an immigrant, explored their own perceptions of immigration and prejudice, to even understanding that choices have consequences and these consequences can affect emotions interpreted through the lens of game emotions, all teens explored their own individualistic emotional responses. Data from the Russell Affect Grid, which was administered before and after playing “Papers, Please” provided a unique perspective in how the teens’ emotional statuses changed after playing. With regards to arousal, the average score across all teenagers did not report any significant change from pre-gameplay (5.08) to post-gameplay (5.0). In contrast, valence decreased from an average score of 5.38 pre-gameplay, to an average score of 4.69 post-gameplay.
While these numbers do imply some level of engagement with the game through a quantitative lens, it is difficult to infer much from these numerical results as some teens reported drastic changes either on arousal, or valence, or both, and some teens reported no changes at all. And of the teens that individually reported drastic changes, half identified as children of immigrants and half did not, therefore not providing any conclusive information about these numerical results.

While the Russell Affect Grid was an exploratory attempt at using a quantitative method to
assess emotional responses, no significant changes were seen overall in pre- and post-gameplay. However, future research may be able to implement such a tool if a bigger sample size were acquired.

**PLAYING WITH IMMIGRATION IN MUSEUMS**

The only thing that could be said with certainty about this study is that these youth each had distinct and individual experiences while playing “Papers, Please.” And although each of their emotional responses were unique to the individual and their life experiences, some claimed the experience of gameplay was depressing. Even so, nearly all teens agreed that museums ought to utilize games similar to “Papers, Please” in their institutions. How that would be implemented however varied amongst the youth. The two teens who did not agree that this would be beneficial to a museum setting referenced the monotony of the game, stating the time commitment needed to even understand the game would discourage museum visitors from playing for extended periods of time.

Of the teenagers who did agree that “Papers, Please” or a similar game could be used in an informal setting, three youth discussed the potential context of the exhibit or the museum where the game would fit best. These teenagers reported that an exhibit focused on the topic of immigration or border control would be the best method of utilizing the game. They strongly agreed that a game producing such emotional responses must be placed within a context that supports the same topic. However, the four youth who recommended the context of the exhibit also agreed that the approach be discussed through a historical lens, and according to their interpretations, placed within a historical museum.

In addition, three teenagers were big proponents of playing with interactives. They had the mindset that if a game is present, people will play it, despite the fact that it is a game that
focuses on a serious topic and the game itself “is not fun.” Taevioen stated:

People will naturally play games and they like interactive things and they start playing and they’ll be like, ‘What is this?’ and they get through and all their family dies and they go ‘oh.’ And they might have, or even invested, even playing twenty minutes, like, you’re very into the game at that point. I think it would be possible to use it in a couple different kinds of museums. The negative reaction would be, I think, as important as the positive reaction people get…

And Sage, who was unsure about the potential for “Papers, Please” in a museum setting, voiced her concerns about the vagueness of the game. Perhaps it was because of how she identified, as a child of an immigrant or a person of color that she became concerned over how the public would interpret the game, but through her concerns she made the comment:

I want to make sure, I don’t know, I like abstract things but I, for something like social commentary, things just need to be more direct so the lesson is the correct lesson. ‘Cause I don’t want someone to come out with more ignorance than like, ‘cause you know that sometimes happens right? You show a film, it’s kind of artsy, but’s talking about some social justice issue and people come out like more racist than they were before. So, I don’t want that to happen.

Jenkins had a similar concern, and through her conversation she came to the conclusion that the purpose of “Papers, Please” was not to have fun, but instead to make people aware of a situation and an issue. She admitted that people who played the game may not always understand the point, but the game is not intended to make people understand, but rather to become aware.

Along the same vein, Lisa made a similar comment. A comment very nuanced for the position museums see themselves currently. She said:

I think the point of museums is to showcase things that can be controversial and can be like vague about things and it’s up to the people who go to the museum and interpret it their own way and of course yes, there is going to be people who come out of the museum thinking, maybe something different from the start, I don’t know, something like this game, I don’t think you can necessarily have your mind changed that easily or that strongly from the game. Uh, yah it's definitely important to showcase more things like this at museums because it makes more of statement and gives more of a reason to, ‘cause people want to go to museums to see things that they wouldn't be able to see at like, you know, a city hall, or school, or something like that. The point of museums is to be controversial.
CONTINUED DISCUSSIONS

With no definite consensus on the role of games in museums, this research sought to explore and describe the emotional responses of teenagers after they played “Papers, Please.” Thanks to the participation of thirteen teenagers from EMP’s Youth Advisory Board and Pacific Science Center’s Discovery Corps, the findings suggest that games focusing on topics around social issues, like immigration, have the potential to evoke not only narrative emotional responses, but also encourages discussion of personal immigration experiences.

Teenagers involved in this study discussed many concepts of the game after playing, from understanding the mechanics of the game and becoming aware of the minute details needed to fully play, to examining the narrative of “Papers, Please” and exploring the implications it might hold for character’s situation and family. Teenagers expressed their feelings of stress and being overwhelmed with the amount of work required of them to play, as well as frustration over the limited choices afforded to them within the narrative. And most unexpectedly to these youth, that “Papers, Please” even existed and that there could be a game focused on immigration and that such a game encourages conversation about the implications of such an issue.

Although it was difficult for teens to pinpoint specific moments in the game that encouraged an emotional response, teens often cited aspects of prostitution, human trafficking, poverty, illness, and overall immigration topics and moments that elicited emotional distress. Teens expressed their opinions of the overall oppressive nature of the game and the use of art and music within the game that encouraged such an intense environment. When discussing emotions in the game in general, many teens explored aspects of family, not only within the framework of “Papers, Please,” but often citing their own personal experiences with their families and how they experienced immigration on a personal level. For some teenagers, this
game was an avenue to discuss these personal moments in life and to explore the idea that games can be made as a statement or as social commentary to a bigger situation.

With the understanding that games have a capacity to empower their players, many of the teenagers in this study often felt powerless, without agency, and in general felt helpless about the situation unfolding within the game. For the few teens who identified as children of immigrants, they expressed concern over the realness of the game, and even allowed their choices within the fictional world to be influenced by their own personal stories, drawing on their family’s experiences of immigration, prejudice, and even racism.

Teenagers in general likened “Papers, Please” to various aspects of real situations both in the United States and abroad. For some teenagers, this relation to reality could be seen through conversation with their classmates, through witnessing either first or second-hand the monotony of repetitive jobs, to immigration in general, and even to conflicts they were aware of occurring in North Korea, Russia, Palestine, and Israel. This ability to easily parallel “Papers, Please” to current issues around immigration and prejudice was discussed in some aspect through all interviews with the youth, providing unique insight into how these teenagers can create such relations between a game, a fictional world, and their reality.

Although the insight through qualitative analysis provided fascinating information in how the youth used and understood “Papers, Please,” as a result of the sampling size, in no way are findings conclusive. Data from the Russell Affect Grid cannot be used to interpret for certainty if emotions can be measured from this particular game through this particular instrument in this particular study. However, from the discussions with the youth and their willingness to voice ideas, beliefs, perceptions, and even emotions, it can be garnered that future research with a
bigger sample size may provide not only more generalizable results, but the level and depth to explore how immigration can be discussed through innovative methods such as gaming.

Games in themselves are permanent fixtures to our contemporary culture and with the advent of indie games, there is the possibility to continue this study with not only the topic of immigration, but focusing on social issues around poverty, depression, cancer, sexuality, and other social issues. And as a very perceptive teenager said, it is the role of museums to be controversial. How controversial and in which ways do museum choose to exemplify this has yet to be determined, but with the use of independent games as a starting point for discussion, perhaps a method can be found.
Chapter V: CONCLUSIONS

The purpose of this exploratory study was to assess and describe the emotional response of teenagers after the played “Papers, Please”, a game displayed at EMP’s Indie Game Revolution exhibit. This research suggested that games like “Papers, Please” was capable of not only engaging youth in game and narrative emotions, but also provided an environment where youth who identify as children of immigrants expressed their own personal experiences with immigration and the prejudice that is often associated with it.

Play in museums go hand-in-hand, from roleplaying to free play, to learning science, math and art, museums are the perfect space to immerse and educate through exploratory means. The growth of games both as an industry and as educational tools in both formal and informal learning spaces also ensures that these digital mediums have a permanent position in our contemporary culture. Games have the amazing capacity to engage users in an experience that is social, with room for personal experiences to develop. And as these modes of engagement continue to grow in museums, so must non-profit practitioners continue to discuss the role of games in museums and question the breadth and depth of experiences these tools can evoke.

Albeit limited published scholarship has been done on the emotional responses of these interactive technologies in informal settings, this research sought to introduce one method by which museums may be able to use games in a context that explores topics around social issues like immigration. Utilizing teenage participants who were already associated with their respective museum, and were willing to voice opinions about the role video games should play in these institutions, it can be suggested that games can have a profound impact in informal learning spaces beyond the traditional means of current use.
RECOMMENDATIONS

Recommendations based upon this research would include careful consideration of any form of technology employed in a museum setting. Although games are a method of engagement for many teenagers, and a few youth of this study stated that if a game is present people will play regardless of the content, practitioners must understand that games are not merely technology, but rather a way to understand the world through play. Therefore, if games are to be used for the purpose of creating dialogue around social issues and promoting awareness and cultural understanding through emotional responses, it is suggested that whatever game is chosen is selected through careful consideration and with great thought. As this study suggests, learning can take place through games, regardless of whether this was the objective of the game or not.

It is also suggested that games in museums be placed within a context that supports the game content. With regards to games focused on social issues, this context may be the exhibit in which the game is displayed or supplemental programming that may facilitate the game play experience. While games are systems in and of themselves and do not require context for messages to be conveyed, with topics such as immigration and prejudice, and the hope of fostering dialogue around this topic, supporting context may provide an environment of expectancy and encouragement of discussion.

Lastly, it is recommend that research and studies continue in order to fully understand how games may play such a vital role in museums and to further push considerations in how games may be used to broach new discussions in a museum setting. Teenagers will continue to play video games and museums will continue attempting to entice this elusive demographic. Indie games are but one method to engage teenagers. With the definition of what is a game ever expanding, the ability to emotionally captivate and influence audiences is possible and by
marrying of both video games and teenage engagement, perhaps museum may have the
opportunity to intentionally integrate gaming into their existing content in ways that may engage
audiences in meaningful, emotional ways.
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APPENDIX

Instrument 1. **SELF-REPORT RUSSELL AFFECT GRID**

Emotions at Play: Assessing Emotional Responses in Adolescents after Playing “Papers, Please” at the EMP Museum
University of Washington, Museology Program
Lead Researcher: Anna Lopez // Email: annalo24@uw.edu; AnnaL@empmuseum.org
Thesis Advisor: Nick Visscher // Email: vissche2@uw.edu

Date | Time | Location | Interviewer

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</thead>
</table>

“I’m going to ask you to place a couple of checkmarks on this grid to represent how you are feeling at this moment. There are two dimensions on the grid. From bottom to top is a measure of how alert you are and from left to right is a measure of feelings of pleasantness or enjoyment. For example, let’s say you’re on a roller coaster—you’re probably very alert, so you would put a checkmark somewhere in this top half of the grid. Now, if you’re enjoying that experience you would probably put a checkmark somewhere over toward the upper right hand quadrant, toward excitement and if you’re scared of roller coasters you’d be feeling something closer to stress and would put a checkmark on this left side. Now, let’s say you’re sitting in class, you’re probably not as alert as you were on the roller coaster so you would probably rate your alertness somewhere in the bottom half of the grid. If you’re interested in what you’re hearing and are enjoying yourself, you’ll be on the right side toward relaxed but enjoyable, but if you are bored and really don’t like or care for the class or topic, you’d be on the bottom left half toward sleepy and unhappy. Does this make sense?”

Example:

<table>
<thead>
<tr>
<th>Stress</th>
<th>Arousal</th>
<th>Excitement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpleasant Feelings</td>
<td>Pleasant Feelings</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Sleepiness</td>
<td>Relaxation</td>
</tr>
</tbody>
</table>

PRE-GAMEPLAY SELF-REPORT RUSSELL AFFECT GRID
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Interviewer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Verbal Assent Given</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### High Arousal

- Stress
- Unpleasant Feelings
- Depression
- Sleepiness

### Low Arousal

- Excitement
- Pleasant Feelings
- Relaxation

- Pleasant Feelings
### POST-GAMEPLAY SELF-REPORT RUSSELL AFFECT GRID

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Interviewer</th>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Verbal Assent Given</th>
</tr>
</thead>
</table>

“I’m going to ask you to place a couple of checkmarks on this grid to represent how you are feeling at this moment after playing “Papers, Please.”

![Affect Grid](image)

- High
- Stress
- Arousal
- Excitement
- Unpleasant Feelings
- Pleasant Feelings
- Depression
- Sleepiness
- Relaxation
Instrument 2. **SEMI-STRUCTURED INTERVIEW**

**Emotions at Play: Assessing Emotional Responses in Adolescents after Playing “Papers, Please” at the EMP Museum**

University of Washington, Museology Program

Lead Researcher: Anna Lopez // Email: annalo24@uw.edu; AnnaL@empmuseum.org

Thesis Advisor: Nick Visscher // Email: vissche2@uw.edu

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Interviewer</th>
</tr>
</thead>
</table>

“The goal of this interview is assess your emotional response after playing “Papers, Please.” This semi-structured interview will last about 45 minutes. We will talk about the game in general, and how you feel about the game and the topics it explores. All your answers will be confidential and your identity will be protected, so feel free to express whatever you are thinking and feeling. You may refuse any questions you do not wish to answer. Alright, let’s begin!”

**Interview Questions:**

1. So you just finished playing “Papers, Please”, can you tell me all about it? Describe the game to me from start to finish using as much detail as you can.

2. What did you think about the game? What did you think the game was about? Was there anything about the game or the story that stood out for you? Tell me about it.

3. How did you feel during the game? Can you describe that? What specifically in the game made you feel that way? Was there a specific part? Why do you think you felt that way?

4. In the game, you had control over who got into Arstotzka right? How did that make you feel?

5. As you were playing the game, what were you thinking? Did this game remind you of anything? Have you seen anything like this in the news or in society? Do you think it relates? How?

6. Should museums utilize games like this in their exhibits? And if so, in what context?