Pass the Control(ler): Shifting of Power in Families Through Intergenerational Gaming

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Abstract. Interpersonal power, an influential force in relationships, changes over time. Older adults may experience diminishing power as roles in the family shift, leading to negative physical and emotional outcomes. In this study, we examined the potential of joint video gameplay to build or restore power in intergenerational family relationships. Participants (n = 102) were asked to play video games together over a period of six weeks. Participants completed a modified version of the Interpersonal Power Inventory [34] before and after the treatment and responded to a series of open-ended questions post-treatment. Results indicate an increase in referent, expert, and informational power for older adults, and an increase of referent and reward power for younger adults. These findings suggest that with careful design and consideration of current and potential players, video games have the capacity to positively impact families, and social life in general, by generating positive distribution of power among family members.

Keywords: Older adults · Video games · Interpersonal power · Intergenerational gaming · Family relationships · Interpersonal relationships

1 Introduction

Decades of scientific research have placed family communication in a prominent position as the source for a child's attitudes, beliefs, and behaviors. Family members provide a foundation for the development of self, serving as primary socialization agents in the acquisition of interpersonal skills necessary for social wellbeing and relationship development [1, 2], and health behaviors [3] to name a few. While the emphasis in research is usually placed on parent-child relationships, the family as a unit affects the child's development and one of these influential family relationships is that between a grandparent and a grandchild. Distinct due to the usually large generational gap, positive grandparent-grandchild relationships have been shown to produce positive psychosocial outcomes for both parties, where grandchildren gain a source of family values, beliefs, and history, as well as social support, and grandparents gain a source of pride and the feeling of being young again [4]. Studies have shown that young adults have a rather negative view of older adults, holding up the stereotypes of old age-deterioration of physical and mental faculties-undervaluing their competence, their perceived intelligence or abilities [5]. On the other hand, close relationships with grandparents have been found to generate positive stereotyping of older adults [6]. Thus, it is important to

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provide younger and older adults with an opportunity and means to create closer family bonds, improving not only their relationships, but also potentially affecting the views of and interactions among the generations on the whole. In this study, we examine the outcome of joint video gaming on intergenerational relationship development within families, especially as it pertains to an important element of relationships—the role grandparents and grandchildren play in each other's lives.

1.1 Aging Population and Family

Population aging is one of the sturdiest demographic trends of the past few decades, particularly in developed countries. According to the National Institute of Aging [7, p. 2], "in 2006, almost 500 million people worldwide were 65 and older. By 2030, that total is projected to increase to 1 billion-1 in every 8 of the earth's inhabitants." The rise in life expectancy combined with the decline in natality is making older adults an increasingly large fraction of the world's population [7], leaving a significant mark on the relationships and the structure of families. Three and even four generations are now in a position to spend significant parts of their lives together, with older adults having a much larger span of years to perform their family roles [8], and "intergenerational relationships...take on an added dimension as the number of grandparents and great-grandparents increase" [7, p. 10]. Thus, it becomes increasingly important to form and maintain strong bonds among older and younger adults in families, especially since these relationships are typically involuntary and tend to be sacrificed on the altar of the all-consuming adolescence and newfound independence. As adolescents become involved in the unforgiving whirlpool of new romantic, academic, and social activities, family ties take a back seat and the frequency and intensity of relationships weakens, especially with the grandparents [9, 10]. One way to maintain important intergenerational relationships within families is through shared activities appealing to both sides of the age spectrum and, potentially, also creating closeness to further strengthen the bonds.

1.2 Video Games as a Relationship-Building Tool

The technological advancements of the past few decades have created a large gap among younger and older adults, alienating them from each other's worlds, and video games are a significant part of that process. While small and large technological miracles have undoubtedly made our lives easier, they have potentially also made a significant part of our daily social routine obsolete. Families and friends still gather, but now around television sets, or even more solitarily in the past decade, around computers, tablets and smartphones. Watching television, the activity on which families spend five hours a day on average [11], does not require nor necessitate much interaction [12]. Thus, those gathered around the screen may share the space but they share little else, either preoccupied by the program or otherwise immersed into social media on other devices and being only physically present. Such lack of communication and interpersonal interaction has led to weaker family ties, distant relationships, and even a breakdown of families and friendships [13].

However, as postulated above, there may be a solution, and it may lie in the technology itself-after all, as the old idiom says, we have to fight fire with fire. The fire of recovery in this case may lie in one of the most controversial and discussed outcomes of the technological golden age-video games. As the biggest entertainment industry in the world, perpetually drawing attention of young adults especially, video games may hold the potential to make people happier and help them maintain a healthy social life within and outside their families. Indeed, research has shown that video gameplay, especially in the circle of friends and family members, can yield positive physical and mental outcomes, as well as improve relationships and promote connectedness [14, 15]. Older adults are increasingly responding to their call as well-between 1999 and 2011, the number of gamers older than 50 has increased from 9 to 26% [16, 17]. Older adults, it transpires, enjoy demanding, intellectually challenging games with rich narratives, and large, involved communities in which they can take part-in short, they just want to have fun [18, 19]. And they especially enjoy the social side of gaming [20, 21], as a means to spending time together, requesting help and attention from children and grandchildren, or something to structure the conversation with friends and family. In intergenerational family gaming, in particular, positive emotions such as happiness and enjoyment coalesced with - and stemmed from - the bonding, the conversations, the feeling of being closer to loved ones and of maintaining relationships across distances [15, 22–24].

1.3 Power in Interpersonal Relationships

The findings of the studies on older adults and gaming become especially important as previous research on aging has shown that the loss of habitual roles—being employed, being a spouse, an active parent—results in a feeling of loss of power in existing relationships [25]. According to the social power theory proposed by French and Raven [26], interpersonal power is a structural force in relationships that determines the potential of an individual to exert influence over another person.

Based on the types of influence, French and Raven [26, 27] specified six sources of interpersonal power in relationships:

- *reward power* the ability to provide the other person with tangible or intangible things they desire (e.g., parents promising the child an ice cream if s/he gets ready for school on time).
- *coercive power* the ability to punish (another source used frequently by parents, e.g., parents threatening to ground the child if s/he lies).
- *legitimate power* the ability to influence based on one's formal position (e.g., a boss, a teacher, or a police officer)
- *expert power* the ability to influence based on perceived special, valuable knowledge and expertise (e.g., a broker managing an investment portfolio).
- *informational power* the ability to persuade the other person through information, or provide information in decision-making (e.g., a car mechanic providing guidance on what type of engine oil to use).

• *referent power* – the ability to influence based on the other person's admiration and identification with the individual (e.g., a celebrity marketing a product in an advertisement)

Power dynamics in interpersonal relationships fluctuate, with previous research showing that a disbalance or powerlessness can lead to negative physical and psychological outcomes, such as aggression and depression [28, 29]. Greater power equality, however, leads to higher relationship satisfaction [30].

As noted before, family power dynamics may change for older adults with the loss of habitual roles [25]. With the shifts of roles and perceptions during adolescence, older adults may experience weakening or loss of referent, expert and informational power, as well as coercive and reward power when it comes to younger adults in their families. Since interpersonal power signifies influence, the dwindling of power in existing relationships leads to feelings of insignificance and thus social isolationism, which in turn leads to poorer physical and mental health [31]. In two previous studies on intergenerational gaming, older adults have emphasized the satisfaction gained from being able to show their younger family members "that old age still carries knowledge and skill" [15, p. 139, 32]. Thus, intergenerational gaming may not only provide much needed social connection between grandparents and grandchildren, but also have the potential to restore some of the older adults' diminishing interpersonal power and influence within the family.

1.4 Purpose of the Study

How technology and society shape each other in a reciprocal process is the basic question of this study, since video games are both shaped by and shape the lives of those engaging in them. Digital technology has changed the fundamentals of how we interact and bond in society, taking away old and offering new infrastructure through which we can act [33]. Therefore, the aim of this study is to provide an interactional understanding of social video gaming within families. More specifically, what are the effects of social gaming on relationships, and what is its current and potential role as a social leisure activity in everyday family life? The main focus of the research presented here is the intergenerational social interaction in, around, and through video games, and how it potentially changes interpersonal power in family relationships.

2 Method

To fully understand player interactions and relationship development in and around video gameplay, data were collected through a multi-method, six-week study. The participants were recruited from two classes at a large Southern USA university after receiving approval from the appropriate Institutional Review Board. Each participant was asked to select an older adult, age 55 and above, from their immediate family circle who will consent to play video games with him/her at least three hours a week, either in a mediated or co-located setting. Younger adults received partial course credit while older adults did not receive any compensation for taking part in the research. The data

from the dyads was collected over a period of six weeks. The duration of six weeks was determined based on the research findings of a pilot study implemented during the summer of 2016.

Participants. The sample consisted of 102 participants: 51 older adults, 32 females and 19 males (M = 1.63, SD = .49), ages 55–77 (M = 60.96, SD = 5.34), and 51 younger adults, 31 females and 20 males (M = 1.61, SD = .49), ages 17–28 (M = 20.41, SD = 2.11). The older cohort comprised 44 (88%) grandparents, (7.8%) parents, 1 (1.96) stepparent, and 1 (1.96) aunt. The younger cohort comprised 44 (88%) grandchildren, (7.8%) children, 1 (1.96) stepchild, and 1 (1.96) niece. All participants were from the United States.

Data collection. All participants were tasked with completing an initial questionnaire, comprising three sections. The first section contained questions on demographic information. The second section comprised questions on previous gaming experiences (e.g. "Have you ever played video games?", "What games do you play most frequently?"). The third section consisted of questions from the modified Interpersonal Power Inventory [34], measuring participants' perception of their gaming partners' power. Power parameters were measured on a seven-point Likert scale, with predetermined questions for *expert power* (n = 5; sample item: "_____ probably knows the best way to do the task"; $\alpha = 0.83$), *referent power* (n = 5; sample item: "I look up to ______ and generally model myself accordingly"; $\alpha = 0.73$), *informational power* (n = 5; sample item: "______ gave me good reasons for changing how I did the task"; $\alpha = 0.81$), *legitimate power* (n = 5; sample item: "I like my _______ and his/her approval is important to me"; Cronbach's $\alpha = 0.74$), and *coercive power* (n = 5; sample item: "It would have been disturbing to know that my supervisor disapproved of me"; $\alpha = 0.81$).

The questionnaire was distributed online, together with the digital consent form. The questionnaire took approximately 20 min to fill out.

Younger adults were tasked with, in cooperation with their older gaming partner where possible, selecting a video game or games they would play together. After completing the planned six weeks of playing video games at least three hours a week, participants were asked to fill out the closing questionnaire comprising of four sections. The first section contained questions on demographic information. The second section comprised questions on the games played during the study, location (collocated, remote, or other), and type of play (competitive, collaborative, or other). The third section consisted of the same questions from the modified Interpersonal Power Inventory [34] as listed above, collecting data on the participants' perception of their family members' power post-treatment. The fourth section was reserved for qualitative data collection, allowing the participants to provide detailed and personal accounts pertaining to their gaming experience during the six weeks of the study. The general questions asked the participants to reflect on their gaming ritual, the expectations, outcomes, and plans.

Data analysis. Quantitative data was then examined using pretest-posttest statistical analysis. The first author reviewed the qualitative data, identifying themes in the participants' answers, looking particularly for experiences pertaining to interpersonal power.

Exemplars were identified and placed in a draft file of findings. The second author then reviewed the draft findings and the two researchers discussed them at length. Agreement on the appropriateness of the exemplars was 100%. The researchers then discussed how these findings relate to previous research and agreed on their interpretations of motivations and behaviors which are reported in the next section.

3 Findings

Based on the responses from our participants, we answer our questions about if and in what ways intergenerational game playing may affect the perceptions of interpersonal power in family relationships. Both older and younger adults largely reported positive outcomes from playing video games with family members–while enjoyment was an important aspect, maintaining connections with each other and with the home, and training cognitive and physical abilities were repeatedly emphasized. The shifting of the roles and power was also noted, as both gained more insight into each other's lives, knowledge, and thoughts.

3.1 Older Adults

The majority of the older adults who participated in the study—33 or 64.7%—reported never having previously played video games. None of the remaining 35.3% identified as being active gamers, but stated they have either tried video games in the past or play sporadically. An overwhelming number of the participants (46, 90.2%), however, reported enjoying the experience of playing games with their family members over the course of the study, citing fun, gratification of spending time together, learning something new, as well as feeling happy for being involved and able to help their grandchild with a school assignment.

When it comes to changes in perception of personal power, the results of the paired t-test comparison of the Interpersonal Power Inventory [34] surveys taken before and after the treatment show some statistically significant outcomes. As displayed in Table 1, after the six-week gaming period, older adults perceived their younger family members as having more referent and reward power, with the latter experiencing the largest increase. The perception of younger adults' informational power increased as well and was on the margin of statistical significance with p = 0.06. The relevance of these results lies in how this change serves the building of the relationship. As older adults got to spend more time and got to know their post-adolescent family members better—or again—their identification with and admiration of the younger adult increased (referent power), and their perception of the potential for rewards gained from the relationship changed (reward power). They also began perceiving the younger adult as a source of valuable information (informational power), which could be anticipated given that the study generally required them to become proficient in a video game, and their counterparts were the ones who provided the knowledge.

Variable/Results	N	Pretest-posttest diff. of M	SD	t	p
Expert power	51	.94	10.94	0.614	0.541
Referent power*	51	.80	2.26	2.537	0.014
Informational power	51	2.73	10.22	1.905	0.062
Legitimate power	51	1.43	10.83	0.944	0.349
Reward power**	51	8.57	9.25	6.615	0.000
Coercive power	51	-1.20	8.43	-1.012	0.316

Table 1. Results of pretest and posttest IPI for older adults and their perception of younger family members.

Mean difference is statistically significant at: *p < 0.05; **p < 0.01

Qualitative data supports these findings, underlining the increase in the perception of younger adults' knowledge and admiration of their competence. As a female participant, age 57, explained:

I was impressed with how much coordination playing the game required, and how good my grandkids were at it. I could never get my figure [character] to do what I wanted them to do, but it became easier to play after a few weeks. My grandson helped me with maneuvers that I had a problem with. It's amazing how quick a person can learn how to master video games, when they have a good teacher.

A female participant, age 63, added:

I really enjoyed interacting with my granddaughter on the day to day basis, even just through the game. I disliked having to ask her to explain how to play the game several times, but she was very gracious about it and answered all my questions in great detail. Overall, I was impressed how well she was able to explain how to play and I eventually caught on and caught up.

A male participant, age 55, elaborated:

I used to teach him how to play these games; and now he teaches me. We often spoke about his station in life and his plans, relationships with others and long and short terms goals and achievements. We spoke a lot about politics and life itself.

Conversations and communication were indeed in the center of most responses. More than two-thirds (70.9%) of the participants reported receiving more rewards from the relationship with the younger adult, whether through more frequent communication, getting to discuss topics they do not usually cover, spending more time together, or learning a new skill. A female participant, age 74, said:

Playing games with my grandson keeps me sharp. We joke and talk and compliment each other on good moves. I love that he treats me as an equal and doesn't hold back. We are worthy opponents because I don't hold back on him either. Playing games has brought us closer, in my opinion. Doing this with [my grandson] is now one of the joys in my life. I feel that playing games together has taught us both different things, we have learned from each other and about each other.

A male participant, age 59, explained:

Me and my stepson enjoyed playing video games together. We often talked about how life was when I was growing up. How things were so different. It was a great opportunity for us to catch up. We often joked about all kinds of different things, but we also had serious conversations about how times are changing. It was really a great opportunity to connect with each other, and I can see us playing in the future.

Despite the positive outcomes, though, only about half of older adults (29, 56.9%) plan to continue with the activity and make it a part of their daily or weekly family routine. The cause of this lack of motivation to continue is clear—younger adults have considerably underestimated the technical abilities of their older family members, as well as their capabilities in mastering new forms of electronic entertainment. Such a response was to be expected; after all, even game designers "often view older users as 'old' first and 'users' much further down the proverbial list – somewhere after 'physically impaired', 'socially bereft', 'technically illiterate' and 'struggling to use unmodified versions of mainstream technologies'" [35, p. 27].Thus, younger adults largely selected games based on old tabletop models, such as *Trivia Crack* and *Words with Friends*. Such games have a minimal learning curve and are less involving, which in turn led to older adults soon becoming bored. As one of the older male participants, age 66, said:

If I found a more challenging version of the game that had harder levels of questions, it might be more compelling to play often.

Importantly, of the 29 older adults who plan to continue playing with their family members, 16 either played more challenging games, such as Wii games, or sport and racing simulations, or simply played a variety of easier games. While some concerns about game accessibility may be valid, as many older adults do dread the fast response time requirements and the complex control(ler)s, this concern should be addressed and removed as an obstacle in enjoying the many worlds and stories video games provide. We have discussed related implications of video game accessibility at a greater length and provided recommendations elsewhere [32].

To summarize, older adults who have for the most part never played video games before found the experience enjoyable, rewarding, and bonding. Joint play over the sixweek period positively shifted their perceptions of younger adults' reward and reference power. Slightly more than half of the participants wish to continue playing video games with their younger family members. Those who did not express the desire to continue mostly cited boredom as they may have had not been challenged enough by the games selected by their younger family members.

3.2 Younger Adults

An overwhelming number of younger adults who participated in the study (44, 86.2%) reported playing or having played video games, of which 11 (21.6%) identified as active gamers who play six or more hours per week. The majority of the participants (40, 78.4%) reported having enjoyed the experience of playing games with their family members over the course of the study, referencing connectedness, sharing an activity with a family member, and fun.

For the perception of personal power, the results of the paired t-test comparison of the Interpersonal Power Inventory [34] surveys taken before and after the treatment shows statistically significant outcomes for three variables. As presented in Table 2,

after the six-week gaming period, younger adults perceived their older family members as having more expert, informational, and referent power, with the latter presenting the largest increase.

Table 2. Results of pretest and posttest IPI for younger adults and their perception of older family members.

Variable/Results	N	Pretest-posttest diff. of M	SD	t	р
Expert power**	51	2.37	6.12	3.6541	0.0004
Referent power**	51	4.87	6.17	7.4430	0.0000
Informational power**	51	3.43	8.54	3.7864	0.0003
Legitimate power	51	.15	12.38	0.1112	0.9117
Reward power	51	.08	5.25	0.1413	0.8880
Coercive power	51	-2.59	17.09	-1.4323	0.1556

**Mean difference is statistically significant at p < 0.01

Much like with the outcomes of older adults' data, these results point to changes in and developing of their relationships. Spending time together, talking, and engaging in what is frequently considered a young person's type of activity with the older family member significantly affected younger adults' perception of their gaming partner. The admiration of and identification with the older adult increased (referent power) together with the perception of their family member's knowledge and expertise (expert power). They also began perceiving the older adult as a source of valuable information (informational power), perhaps, as the qualitative data suggests, owing to the conversations, exchange of stories, and the provision of advice.

Similar themes threaded through qualitative data as well, where younger adults expressed regard of their older family members' abilities in the acquisition of new skills. One female participant, age 20, stated:

I was very surprised that she won every game. I guess I was surprised that my grandmother could be better at this game than me.

A male participant, age 18, had a similar experience:

I was blown away by how quickly my grandmother grasped game, much faster than I expected from an older person. She was also much more enthusiastic than my brother, and also more competitive.

Others were not quite as flabbergasted, but did find their older family members' competences delightful. A female participant, age 19, explained:

I liked that I had a great deal of time of playing a game with my grandmother; it kept her and I communicating. She learned how to send me messages through Word with Friends when I could not answer my phone; I thought it was adorable that she learned something I did not know about the game.

Older adults learned fast, and some "students" quickly overtook their "teachers," becoming the experts in the game. Still, younger adults enjoyed the experience, as one male participant, age 20, showed:

I expected playing video games with my father will be challenging, but after I taught him how to play the game, he got good fast and ended up giving me advice on how to play. I liked spending time with him, we would talk and catch up on how our day was while at the same time getting slightly competitive in an endearing way.

A female participant, age 18, added:

My experience playing video games with my dad was fun. We played Words with Friends. I liked having a constant action in the background that kind of forced me to communicate with him every day while I'm away at college because I usually don't. I'm closer to my mom, so I just communicate to him through her. It gave me a constant reminder to talk to him daily. We did talk a lot through the chat mode in the app. Every play, he would usually have a comment on what word I played or why I chose to place it where I placed it on the board. We compared strategies over Thanksgiving while I was home. It gave us something else to talk about while I was home, too. We were competitive and joked about it while playing. I like the challenge of beating him because he has become really good at the game and beats me most of the time.

Other participants also found enjoyment in the communication and conversations with their gaming partner, and learned more about them. As one male participant, age 19, explained:

I liked that we had the ability to communicate and actually play a game together. I feel like I learned more about how my mom thinks, I can understand better our different choices. I did not like that she was really close to beating me every time.

And when the study was over, some were even disappointed they will not "have" to play together anymore, as a female participant, age 18, conveyed:

I liked that we were playing together. It was a nice since the game put us both in position to have conversations about the game and other things in her and my life at the moment. When I told my grandma the six weeks were over, she was disappointed, and so was I. I enjoyed playing with her almost every day. She is about 900 miles away from me so it was a nice way to keep connected and share in each other's lives.

Even with such positive outcomes, only a bit more than one-third of younger adults (19, 37.3%) plan to continue playing video games with older family members, while the remaining 32 (62.7%) either do not plan to engage in gaming at all, or will play at the request of the older adult. Qualitative data shows that the source of this decision is three-fold: the aforementioned and still pervasive view of older adults as struggling with—or dismissive of—new technologies and thus not likely to play more involving games, the disinterest in the games seen as appropriate for older adults due to their simplicity, and the purported lack of time.

To summarize, younger adults found playing video games with their older family members a source of enjoyment, conversation, and social bonding. The six-week gaming assignment shifted their perceptions of older adults' expert, referent, and informational power, gaining more knowledge of their family members and respect for their abilities, skills, and expertise. Only about 37% of them, however, plan to continue gaming with these older family members. Those who did not express the desire to continue cite boredom with simple games, lack of time, and disinclination to put effort into teaching older adults more complex controls and games as main reasons.

Beyond this, an interesting overall trend emerged: for both groups, only coercive power or the perceived ability to punish decreased, while reward, expert, referent, legitimate, and informational power to varying degrees increased over the course of the study. This perhaps points to the relationships becoming closer and the influence of the ability to punish diminishing as each individual stands to offer and gain more positive outcomes from that specific bond.

It is important to note that biological sex, location (collocated vs. mediated play) or type of gaming (collaborative vs. competitive) were not significantly correlated with the difference in any of the sources of interpersonal power for either group. This shows that physical presence is not imperative in gaining benefits from intergenerational gaming, and whether players prefer collaborative or competitive games is not likely to affect the relational outcome of their joint activity.

4 Conclusion

In this study, we explored intergenerational video game playing among family members, seeking to find whether such shared activity provides a platform for building, maintaining, or balancing interpersonal power in relationships. Using a mixed-methods longitudinal design allowed us to collect both power-specific quantitative data and detailed qualitative accounts of the effects of long-term gaming on dyadic family relationships.

Corresponding to the findings of previous studies [15, 32], the social side of gaming, the opportunity for conversation and bonding, drew in both younger and older adults. The older cohort, largely consisting of individuals who have never played video games before, found the experience entertaining, interesting, and gratifying. The younger cohort enjoyed the opportunity to display their expertise to older family members while in turn discovering more about them and receiving the benefit of an interested listener and adviser. While they played video games, in the background their relationships changed. The shift we were looking for materialized in the upward slope of referent power for both sides, each person holding the other in higher esteem after the weeks of joint gaming. Younger adults also gained greater awareness of their older gaming partners' knowledge and capability, while older adults saw their relationships with postadolescents as more rewarding.

Not all results were positive, and stereotypes of old age as lacking physical and mental acuity to master a new technology like video games influenced the study to a certain measure. Younger adults predominantly selected tabletop-based app games, something they perceived would be easy and accessible to their older family members. In turn, in a lot of cases, both sides at some point became bored with the electronic version of *Scrabble* they were playing, although not bored with the interaction. However, the longer the activity lasts, the less enjoyment both sides would get from playing the game, falling away and thus losing the interaction too.

The social power of video games lies in the backstage, in all the ropes and pulleys that work together to create the experience that is on the surface entertaining, but also affects heart, body, and soul of those who take part in it. The more we know about factors affecting the outcomes of social gaming, which ropes and pulleys work well together, the better we can put new technologies to use in the maintenance of the most important relationships throughout our lives.

5 Implications

With each year, the aging population grows. In the same time, especially in the Western world, the use of technology has led to people living in the same space but rarely spending "quality time together," actually interacting and bonding. While popular media continuously emphasize the importance of meaningful interactions among family members and friends for the strength of the relationships, resulting in calls for sharing meals without distractions, with the wide introduction of personal computers, tablets and smartphones, the silence and distance are becoming more pervasive. In order to enhance lives across generations, the same technology can be used to counter this effect. With careful design and consideration of current and potential players, video games have the capacity to positively impact families, and social life in general, bridging the distance and drowning the silence.

6 Limitations

As with any research, this project has its limitations. The number of participants was relatively small, and they were all from the United States. As a consequence, we should not over-generalize our findings. In addition, for younger adults the participation was a part of the course requirement, which may have impacted their perception of the project —must vs. want—and thus the level of their participation and satisfaction. Future research should address the limitations to this study, as well as examine more specific aspects of personal vs. impersonal powers and influences, examining the effect of existing relationships, family patterns, and emotional and physical states. These additional motivations are important to gaining a more complete picture of power shifts in family relationships and how video games can be used to help balance them.

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