

Workshopping with the Acculturative Game Design Framework

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ABSTRACT

This paper explores the use of the Acculturative Game Design (AGD) Framework to address acculturative stress and promote understanding within the Latine community in the United States. The Latine population faces unique challenges related to acculturation, intergenerational communication, and mental health, particularly concerning issues related to gender identity and sexuality. The study aims to explore the application of the AGD Framework, a framework aimed at mitigating acculturative stress and improving intergenerational communication among Latine participants, through a pilot workshop. Participants designed games reflecting Latine cultural values, illustrating mechanics and preferences relevant to their experiences. This inaugural application of AGD with Latine participants provides insights into serious games' potential in this context.

Keywords

Serious Games, Acculturative Game Design, Latine, Inclusive Design, Acculturation, Game Design, Design Frameworks

INTRODUCTION

As of 2022, there are 63.7 million Latine¹ living in the United States (U.S. Census Bureau 2023), which although a minority population, still makes a big impact in the US. Acculturation is the process of balancing two cultures, the culture of origin and the culture of their current residence, and often leads to challenges known as acculturative stress (Berry 2015). This issue is particularly common among Latine immigrants and their first-generation children (Berry 2015). These challenges that Latine individuals face include tensions in communication, identity formation, and social integration, especially regarding gender identity and sexuality. Religious influences in the Latine communities often emphasize conservative perspectives, creating clashes with developing identities (Espin 2018).

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These issues can lead to difficulties in parent-child communication, contributing to mental health struggles among first-generation Latine. Latine individuals born in the US have higher rates of psychiatric disorders compared to immigrants (Alegría et al. 2008; Pumariéga et al. 2010). Suicide-related thoughts and attempts are alarming (Kann et al. 2014), with recent research linking these to family dysfunction, acculturation, and identifying as Latino homosexual (Rothe and Pumariéga 2018).

Similarly, the LGBTQ+ community faces mental health challenges, with higher rates of mental health issues and substance misuse (Silvestre et al., 2013; Semlyen et al., 2016). Prejudices and discrimination contribute to anxiety, depression, and substance abuse (Kates et al. 2018), with LGBTQ+ youth more prone to suicide attempts (Kann et al. 2016).

Mental health issues among youth are a concern, but unique cultural and socioeconomic factors affect Latine communities. Cultural taboos deter help-seeking, and socio-economic factors, such as lack of insurance and high poverty rates, limit access to healthcare (Cabassa 2016; Noe-Bustamante 2020; Creamer 2020).

Promoting open communication and support within Latine families is crucial, especially considering the intergenerational implications of these challenges (Rivera 2007). Serious games, recognized for their potential to influence behavior and cognition, can facilitate intergenerational understanding and communication.

Serious games, depending on the audience and design, may improve knowledge retention, engagement, and critical thinking (Holloway et al. 2012; Thang 2018; Conde 2020). Past studies have suggested successful games in healthcare for physical therapy, cognitive rehabilitation, and pain management (Duval et al. 2018; Hurd et al. 2019). These games may foster empathy, shift attitudes and beliefs, and enhance self-efficacy (Hamari et al. 2016). In therapeutic contexts, they may provide a controlled environment for individuals to confront challenges and reflect on their experiences (Holloway et al. 2012; Duval et al. 2018; Elor et al. 2018, 2019). Serious games can offer a promising medium for addressing acculturative stress in Latine communities.

This paper explores the application of a novel framework in a workshop with Latine participants that designed game concepts towards addressing acculturative stress and promoting understanding of identity and sexuality. This paper primarily contributes to the understanding and principles of game content design and does not focus on the technical aspects of game creation or the development of a game prototype, which will be explored in follow up studies.

Related Work

Serious Games to Promote Understanding

Serious games have increasingly been used to explore complex issues like identity and sexuality. Interactive gameplay has shown promise in enhancing understanding and education. Haruna et al (2021) demonstrated that serious games are more effective than traditional methods in teaching adolescents about sexual health.

Additionally, George et al. (2023) examined a game jam session's role in gender identity exploration, highlighting the importance of game design elements such as genre, character representation, and emotional experiences. Their findings suggest that game design strategies like interpretive flexibility (allowing participants to engage in different formats and having autonomy over the making process) and dynamic feedback are crucial in helping individuals understand and express their gender identity, with game jamming itself being an effective tool for identity exploration.

Serious Games for Behavior Change

In recent years, serious games have garnered attention for their potential in driving behavior change in areas like public health, education, and environmental sustainability. For instance, Morganti et al. (2017) wrote a systematic review of the use of serious games and gamification in promoting energy-efficient behaviors. They found that these approaches can be effective in fostering positive shifts in energy-saving behaviors, with a wide variety in the types of games used and the features that may appeal and motivate players.

In the realm of health, Espinosa-Curiel (2020) developed "FoodRateMaster," to improve dietary habits and physical activity among 8 to 10-year-olds. This game, offering nutritional information and behavior change techniques, significantly influenced the children's food choices positively. These papers highlight serious games as viable tools for behavior modification.

Serious Games to Reduce Stress and Anxiety

In the realm of behavior change, the efficacy of serious games in reducing stress and anxiety has been explored in various studies. Serious games may provide a promising avenue for reducing stress and anxiety by offering enjoyable therapeutic interventions and creating a safe space for players (Corti, 2006; Ryan and Deci, 2017). Games may also provide a distraction from stressors and induce a state of flow (Csikszentmihalyi, 1990), and may be particularly beneficial for addressing acculturative stress through culturally sensitive interventions (Abt, 1987; Corti, 2006). For instance, Maarsingh et al. (2019) demonstrated that the VR game "Stressjam" improved participants' stress mindset, highlighting the potential of VR and biofeedback in stress management.

Why Serious Games?

Serious games, recognized for improving understanding and wellness depending on design and audience, owe much to interaction and gamification. Gamification integrates game elements in non-game contexts, potentially engaging users effectively without new game development (Deterding et al., 2011). Serious games, aligning with Self-Determination Theory, can fulfill psychological needs and induce gameflow enjoyment, thereby motivating continued play (Ryan et al., 2006; Ryan and Deci, 2017). There may be an opportunity to apply these concepts to improve intergenerational communication through media creation, addressing issues like acculturative stress. Leveraging serious games principles and drawing inspiration from games that challenge social assumptions and raise awareness (npckc, 2018; Brice, 2012; Smith, 2018), new media can be created to support behavioral and

cognitive changes. Exploring serious games and gamification thus may lead to content that entertains, educates, and supports personal growth.

This paper aims to advance the application of serious games in this context by applying the Acculturative Game Design (AGD) Framework² in a workshop setting, developing game concepts for the Latine community to reduce stress and anxiety. The workshop, involving the Latine community in design, provides insights into cultural influences on serious games' efficacy in mental health. This research aims to bridge the gap in acculturative game design and offers a model for serious game-based therapeutic interventions for diverse ethnic groups, beginning with the Latine community. Additionally, while this framework may apply to other user groups with similar cultural concepts in future research, this paper focuses on the Latine and LGBTQ community to better understand the themes that emerge when the framework is applied.

Study Goals

In light of the challenges shared, this work aims to explore the application of the AGD Framework as conceptualized by Conde et al. 2023, see Figure 1, towards generating game concepts with the intent of mitigating acculturative stress among Latine communities.

The AGD framework, rooted in medium framing, acculturation, and Self-Determination Theory, aims to create game features attuned to players' experiences beginning with conceptualization. The methodology of AGD invites participants to actively contribute by completing an AGD table and partaking in collective discussions. It advocates for a participatory design approach, actively involving stakeholders from Latine and LGBTQ+ communities to ensure the design process is inclusive and collaborative. This framework emphasizes engagement, co-creation, and dialogue around acculturation and behavior change. The framework's potential becomes pivotal during the early stages of game development, where it can fundamentally influence the game's foundational experience. This study explores the potential of applying the AGD Framework in a first-ever workshop setting with Latine participants.

More specifically, the primary goals of this study are:

1. **Pilot the AGD Framework:** To explore the AGD Framework's application to aid users in workshopping game concepts that aim to enhance intergenerational communication and diminish acculturative stress. To achieve this, we facilitated sessions where participants actively engaged with the framework to conceptualize and design their own games.
2. **Uncover themes in Latine Participant-designed Games:** To examine the games designed by workshop participants using the AGD framework and determine their impact on acculturation, acculturative stress, and intergenerational communication.
3. **Understand Latine Audience and Context Design Needs:** To identify the specific audience for which the AGD Framework was most resonant, such as first-generation immigrants, and understand the various contexts in which the framework and the games were applied.

4. Consider Game Mechanics, Contexts, Preferences, and Values: To explore the specific mechanics, contexts, preferences, and values that emerged from the workshop. This objective sought to understand the aspects deemed crucial by the Latine participants when designing games tailored to the unique challenges and requirements of the Latine community.

In summary, this study pioneers the application of the AGD Framework in a first ever workshop with Latine participants, potentially illuminating its effectiveness in bridging intergenerational gaps and promoting understanding of identity, sexuality, and acculturative stress. By focusing on cultural and socioeconomic factors unique to the Latine community, this study aims to provide insights into the framework's impact and its potential game concepts to address acculturative stress.

Transtheoretical Model Step #	Acculturation Elements	
	Separation	Integration
Serious Games	Competency Features	Competency Features
	Autonomy Features	Autonomy Features
	Relatedness Features	Relatedness Features

Figure 1: The Acculturative Game Design Framework, as presented in Conde et al. (2023) paper. Users of the AGD Framework are required to complete the Competency, Autonomy, and Relatedness sections depicted in the model above.

WORKSHOP DESIGN

The study's workshop model utilized the AGD Framework, enhanced with added sections on "Intergenerational Relationships, Communication Strategies, and Game Mechanics," and integrated it into a Miro board, an online collaborative whiteboard platform see Figure 2, for a dynamic, engaging participant experience.

The Miro board, our main interactive platform, facilitated content delivery, tasks, and collaborative discussions.

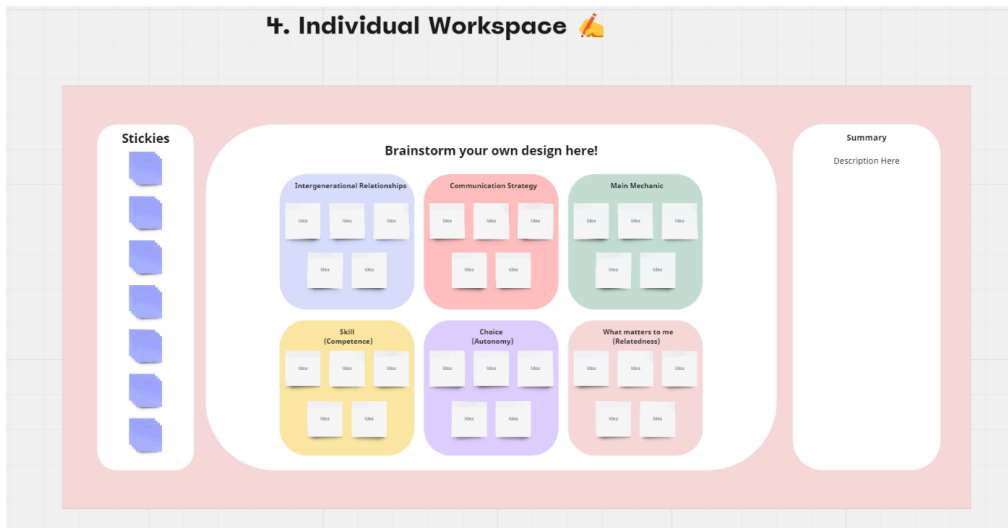


Figure 2: MiroBoard Skeleton Workshop adapted from the AGD Framework. Includes “Intergenerational Relationships, Communication Strategies, and Game Mechanics.”

Participants

Participants were recruited through various channels, including emails, flyers, and notices posted on popular social media platforms such as Facebook, Instagram, and Twitter. The recruitment period spanned from April 2023 and May 2023. To be eligible for participation, individuals had to be above 18 years of age, residing in the United States, and self-identifying as Latine individuals.

Prior to the commencement of this research, Institutional Review Board (IRB) approval was sought and granted to ensure the ethical and responsible conduct of the study. This study was approved by United States Institutional Review Board at UC Santa Cruz under the protocol #HS-FY2023-107.

The participants ranged from 18 to 34 years old, and they represented various backgrounds of the Latine community, reflecting the diverse and multifaceted nature of the population. 8 labeled themselves as first generation, 2 as second generation, 1 as immigrant, and 1 as other.

Age	Count
18-24 years old	8
25-34 years old	4

Gender	Count
Female	8
Male	1
Chose not to disclose	3

Sexuality	Count
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Location	Count
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Asexual	1	Bay Area CA	9
Bisexual	2	Northern CA	1
Heterosexual	3	Southern CA	1
Pansexual	4	Chose not to disclose	1
Chose not to disclose	2		

Table 1: Participants' demographic information. All participants identified as Latine/Hispanic.

Workshop Protocol

The participants joined the workshop remotely via Zoom for accessibility. The choice of a remote format aimed to facilitate a diverse participant pool, though we should note that the majority of participants were from California.

The workshop phase of the study was structured to last at least an hour to ensure the participants have enough time to finish the workshop. The primary researcher oversaw these sessions to evaluate participants' utilization of the AGD Framework and their creative ideation process.

The study followed a structured protocol to guide participants through the usage of the AGD Framework. The protocol was designed to ensure the safeguarding of participant anonymity, reaffirming informed consent, and establishing a clear understanding of the workshop's objectives.

The protocol encompassed the following steps:

1. Initial Setup: Participants were required to log into a Zoom meeting for the workshop. Upon joining the meeting, they were initially placed in the Zoom waiting room.
2. Applying Pseudonym or Anonymity: While in the waiting room, participants were given the choice to change their username to a pseudonym or maintain full anonymity. This step was included to protect participant privacy and encourage open participation.
3. Introduction and Purpose: In the Zoom meeting, the moderator (primary researcher) welcomed participants, reiterated the workshop's purpose, and reminded them of their rights outlined in the consent form, including opting out or withholding data.
4. Contextualizing Focus Groups: Participants were prompted to engage in discussions revolving around three central topics – Intergenerational Relationships, Communication Strategies, and Favorite/Disliked Game Mechanics. It is worth mentioning that the findings from this phase of the study will be presented in a separate paper.
5. Concept Generation using AGD Framework: Participants used a Miro board featuring AGD Framework elements, organized based on prior focus group discussions. This served as inspiration for their games design concepts.

6. Concept Prioritization: Towards the end of the workshop, participants shared their ideas with the group, and if time permitted, they were encouraged to develop an additional design using their new insights.
7. Data Collection: Collected data encompassed participants' game concepts and recordings of the Zoom meetings, which were analyzed to assess the AGD Framework.

This workshop design aimed to provide a structured and ethical approach for piloting the AGD Framework in generating game concepts around addressing acculturative stress and facilitating intergenerational communication among Latine participants. Researchers ensured that participants had a clear understanding of the study's objectives and their rights, while also safeguarding their privacy and data throughout the experiment.

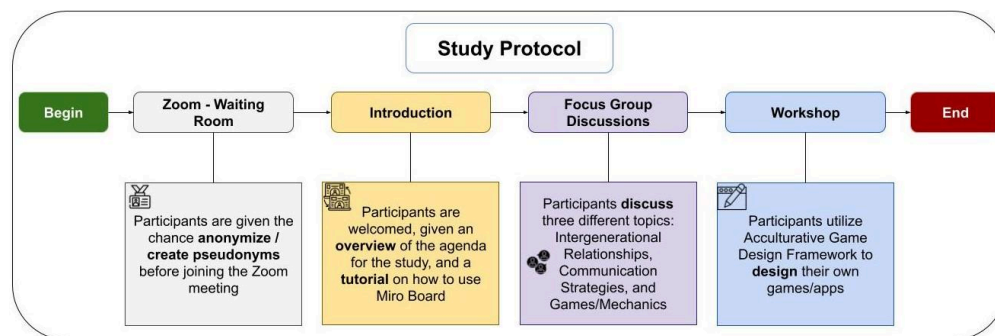


Figure 3: Workshop Protocol. [Begin, Zoom - Waiting Room, Introduction, Focus Group Discussions, Workshop, End].

RESULTS

Latine participants in this study actively utilized the AGD Framework in the workshop to shape their game concepts. Collaboration levels varied, with Groups 2, 3, 4, and 5 designing both individual and collective games, whereas Group 1 solely brainstormed individual game concepts, limited by the time constraints. In this section, we present the outcomes of these creative endeavors, offering a glimpse into the diverse and innovative game concepts generated by the participants.

Key Themes from Participants' Designs

To extract key themes, we employed an inductive thematic analysis approach. This involved a detailed review of the results from participants' designs, focusing on what they placed in each category of the adapted AGD Framework. Our analysis process consisted of several steps:

1. **Initial Categories:** We began by grouping initial ideas into the broader categories based on the key elements of design, Intergenerational Relationships, Communication Strategies, Main Game Mechanic, Skill (Competence), Autonomy (Choices), and What Matters to Me (Relatedness).
2. **Coding:** Following the category groupings, we performed open coding within these categories, identifying recurring concepts and specific ideas presented by the participants in their designs.

3. **Theme identification:** From these codes, we identified themes that were common across multiple participant designs.
4. **Refinement and Validation:** The identified themes were then refined and validated through cross-checking with the raw data to ensure they accurately represented the participants' input.

A detailed visual of the participants' designs can be found in the Appendix section.

Themes on Intergenerational Relationships

1. **Open-Mindedness:** A recurring theme is the emphasis on keeping an open mind and avoiding judgment. This suggests a value placed on being receptive and accepting of different perspectives and ideas, which is essential for bridging generational gaps.
2. **Mutual Effort and Collaboration:** Many groups highlighted the importance of both parties actively contributing to the relationship. This includes mutual effort in spending quality time together and working collaboratively to achieve shared goals, indicating a recognition of the need for cooperation and shared responsibility in building strong intergenerational bonds.
3. **Trust and Support:** Trust is a fundamental theme across several groups, with a focus on building and maintaining trust through support and understanding. This points to the necessity of creating a secure foundation where individuals feel supported and confident in the stability of their relationships.
4. **Effective Communication:** The ability to communicate effectively is seen as vital, with direct communication and the encouragement of expressing oneself mentioned as important factors in strengthening intergenerational relationships.
5. **Respect and Compassion:** Mutual respect and compassion were mentioned as critical components of intergenerational interactions, suggesting that empathy and regard for each other's feelings and experiences are key to nurturing these relationships.
6. **Shared Experiences and Traditions:** Passing on traditions and finding enjoyable activities to do together were noted, emphasizing the importance of shared experiences as a means to connect and transfer cultural and familial values.
7. **Continuous Connection:** Groups indicated the value of maintaining a consistent connection, whether through constant communication or regular engagement, highlighting the role of continual interaction in fostering close intergenerational ties.

These themes collectively depict a picture of intergenerational relationships that are nurtured through respect, empathy, active participation, and open communication, with a strong emphasis on the mutual and ongoing effort to maintain a meaningful connection.

Themes on Communication Strategies

1. **Indirect Communication:** The use of indirect methods such as leaving messages, voice notes, or sending in-game gifts to communicate affection or maintain a connection without requiring immediate interaction.

2. **Direct Communication:** Opportunities for direct, real-time conversations that allow individuals to see and react to each other's expressions and responses, underscoring the importance of live, two-way interactions.
3. **Use of Technology for Communication:** A strong emphasis on leveraging technology, such as in-game messaging, voice messages, pictures, and virtual gestures, to facilitate both direct and indirect communication.
4. **Physical Gestures:** Even in a virtual setting, the representation of physical gestures like handshakes, fistbumps, hugs, and high-fives suggests a desire for embodying traditional forms of expression in digital interactions.

These themes highlight a complex interplay between the desire for close, personal interaction and the need for respect and personal space, facilitated by a blend of traditional and technological means.

Themes on Main Game Mechanics

1. **Customization/Personalization:** Multiple groups highlighted the importance of allowing players to customize aspects of the game. This includes character customization and the ability to make unique modifications, suggesting that players value the ability to personalize their gaming experience to reflect their individuality and preferences.
2. **Freedom to Choose Their Own Experiences:** Several groups expressed the desire for the freedom to choose paths within the game. This theme underscores a preference for non-linear gameplay that empowers players to make decisions and select experiences that resonate with them personally.
3. **Prompted Topic Discussions & Informational Content:** Mechanisms in games that initiate discussions on various topics, including educational and sensitive subjects like LGBTQ+ issues, show a trend towards using games for meaningful conversations and learning. Delivering this content in accessible formats, like memes or boardgame elements, demonstrates a desire to blend learning with entertainment.
4. **Multiplayer:** The recurrence of multiplayer options shows a preference for social interaction within games. This suggests that players are looking for experiences that allow them to connect and engage with others, highlighting the social aspect of gaming as a crucial component.
5. **Content Delivery:** The method of content delivery is another common theme, with groups expressing interest in modern, engaging formats like scrolling feeds reminiscent of TikTok or in-game rewards. This highlights a preference for games that incorporate familiar social media elements to deliver content in an accessible and engaging manner.

These themes collectively suggest a preference for a gaming experience that is highly personalized, socially connected, educational, and flexible, allowing players to navigate the game world in a way that suits their individual tastes and learning preferences.

Themes on Skill (competence)

1. **Communication Strategies:** A strong emphasis on developing communication skills, including texting, leaving voice messages, and sharing

pictures. The ability to communicate effectively is seen as key to maintaining contact and engaging with family members across generations.

2. **Understanding and Empathy:** The ability to understand and empathize with others' feelings and thoughts is frequently mentioned. This includes mindfully listening and comprehending different identities and perspectives, which is fundamental for effective communication and relationship building.
3. **Self-Confidence and Personal Growth:** Developing self-confidence, courage, and leadership through engagement and practice is mentioned as a benefit that extends beyond the game into personal development.
4. **Learning About Others:** The importance of learning about others and gaining a deeper understanding of different identities and topics is highlighted as a key component of competence.
5. **Collaboration and Adaptability:** Collaboration is pointed out as a skill players would learn, along with the ability to adapt, which is crucial in a rapidly changing world and diverse social interactions.

These themes collectively suggest that the development of communication skills, understanding of others, and adaptability are seen as crucial competencies to be fostered within the context of the game. They highlight a multidimensional approach to skill development that values interpersonal connections, personal growth, and adaptability.

Themes on Choice (autonomy)

1. **Personal Expression and Sharing:** The suggestions revolve around sharing personal moments, like sending pictures or messages, and expressing oneself through game elements like gardening. This indicates a desire for players to reveal aspects of their real lives within the game, enhancing the sense of connection and personalization.
2. **Choice in Communication:** Players value having various options for communication, such as tagging, commenting, and reacting to content, which suggests a preference for a customizable communication experience that caters to different comfort levels and preferences.
3. **Structured Flexibility and Topic Selection:** There's a preference for structured flexibility in communication, offering conversation starters and prompts as a way to ease into interactions, while also allowing freedom in topic selection and response time. This suggests that players appreciate having a framework for interaction that still respects their autonomy and provides the space for thoughtful engagement.

These themes highlight the importance of autonomy in the gaming experience, allowing players to tailor their interactions and express themselves in a way that feels natural and comfortable, thereby enhancing engagement and personal relevance of the game.

Themes on What Matters To Me (relatedness)

1. **Open-Mindedness and Non-Judgment:** The importance of maintaining an open mind and a non-judgmental attitude to facilitate presence and engagement within family interactions is highlighted.

2. **Communication and Relationship Building:** The ability to start conversations, learn healthy communication methods, and build relationships, possibly visualized through game mechanics like the rocketship representing relationship levels, is seen as crucial.
3. **Common Ground and Connection:** Finding a middle ground for interaction and the ability to meet and communicate with others, which includes recognizing the strength in vulnerability and the value of forgiveness, suggests a depth to the relatedness sought by the users.

These themes collectively point to the importance of each group where they hope to see users engage in open and constructive communication, build and strengthen relationships, and find common ground for deeper connections. The emphasis is on creating an inclusive and supportive space that respects individual differences while promoting shared understanding and relatedness.

Final Game Concepts Per Group

Group 1 Concepts

This group designed three individual game ideas. The concepts were as follows:

Participant 1.1 - Inspired by the quote, "*If you shoot for the stars and you miss, you're still amongst the stars,*" this participant designed a competitive board or mobile party game centered around aspiring to reach the stars by building a rocket ship. Players navigate a plus-shaped path, collecting parts (representing family members), gaining knowledge (building relationships), and dealing with disasters that impact their progress. The game fosters qualities like courage, self-confidence, and diligence. Challenges may cause players to lose rocket parts, prompting them to choose between building independently or collaborating with others (family members). The ultimate goal is a collective effort to construct and launch a rocket into space, with the first successful player embodying the theme of reaching for the stars and highlighting the importance of family collaboration.

Participant 1.2 - This participant's idea is a collaborative communication app/game designed for easy and low-stakes interaction. It encourages users to send quick updates, messages, and pictures, with a focus on accessible design for all age groups, including older generations. It incorporates game-like elements and collaborative activities, such as taking care of virtual gardens or pets, to foster daily connections in an enjoyable and stress-free way. The user-friendly interface would include tutorials and reminders for simplicity and accessibility.

Participant 1.3 - This last participant concept, titled "Scroll Together," introduces a user-friendly content scrolling app that merges elements of popular platforms like *TikTok* or *Facebook*. In this unique design, family members download the app, set their interests, and are presented with a shared content feed, fostering intergenerational connections. Notably, the app incorporates specially created bite-sized family therapy videos and explanations of family therapy concepts. To facilitate exclusive family interaction, comments, likes, and reactions are limited to family members. Users can tag specific family members, initiating conversations and sharing content. The ultimate goal is to promote family communication by offering

accessible conversation starters through shared content, thereby strengthening family bonds and connections.

Group 2 Concept

This group designed a game to promote intergenerational communication within families. The game encourages players to build and maintain good relationships with family members by focusing on aspects like finding common ground, open-mindedness, and effective communication. It incorporates a playful word game, inspired by Wordle, to make discussions about family and identity-related topics more interactive and engaging. The game is flexible and accommodates different comfort levels and language preferences, allowing various family members to participate comfortably. Additionally, it includes an educational component that explains concepts related to LGBTQIA+ and other identity-related subjects, bridging generational understanding gaps. Overall, the game aims to reinforce values like non-judgment, open-mindedness, and the importance of family bonds to create a positive and understanding family dynamic.

Group 3 Concept

This group designed a multiplayer *Jeopardy*-style game aimed at promoting respectful and meaningful communication and bridging generational gaps. Players form teams and engage in discussions on various topics, similar to trivia games, giving them autonomy in choosing subjects. The game encourages respectful communication, active listening, and understanding different viewpoints. It promotes inclusivity by allowing mixed-age teams, emphasizing trust and support. Overall, the game aims to initiate conversations, improve communication skills, and foster respect, understanding, and appreciation of diverse perspectives in an engaging and inclusive environment.

Group 4 Concept

The group's game concept offers players an open world reminiscent of *Animal Crossing*, where each family member has their own customizable island and character, allowing for personal expression and relaxation. The core functionality includes daily check-ins for mood assessment and a question of the day to foster family connection. When conflicts arise, the app promotes healthy, non-confrontational communication using "I feel" words and offers options to pause and regroup if needed. It also introduces a centralized meeting place for collaborative activities, promoting unity and shared experiences. Players can earn in-game rewards for resolving conflicts and completing tasks. The app is designed to be cross-platform, ensuring accessibility on various devices, and its versatility promotes communication, understanding, and unity while allowing personal expression and creativity.

Group 5 Concept

This group's design is also centered around creating a virtual world similar to *Animal Crossing*. In this game, players have the freedom to build their world or village and customize it. The interactions and choices they make within the game significantly impact their progress and relationships with other characters. The game encourages

collaboration among players, and the choices and dialogues in the game influence how others perceive and interact with them. The game seeks to promote values such as open communication, mutual respect, compassion, understanding, and mutual effort. It also aims to teach players the importance of tolerance, warmth, working together, honesty, transparency, forgiveness, strength, vulnerability, and having fun. The goal of the game is to engage multiple generations, although it may be more accessible and appealing to younger players. To address potential technology barriers faced by older generations, the participants suggest keeping the game interface simple, providing clear tutorials, and ensuring that the game is accessible on mobile devices.

DISCUSSION

The results from employing the Acculturative Game Design (AGD) Framework showcase a variety of Latine participant-led concepts of serious games as potential tools towards fostering communication and addressing acculturative stress within the Latine community. From such, the workshopped game ideation developed by participants illustrate a diverse concept of both the challenges and strengths inherent in Latine intergenerational relationships.

The key themes that emerged from the participants' designs are: the importance of open-mindedness, mutual effort, trust, respect, and shared experiences in nurturing intergenerational relationships. These themes are particularly relevant in the context of the Latine community, where generational gaps can be widened by cultural, linguistic, and social changes. As such the participant's games often reflected a strong desire to bridge these gaps, creating platforms where mutual understanding and empathy are fostered.

Communication strategies within these game concepts also showed a blend of direct and indirect methods, highlighting the complex dynamics of family interactions – no one size game concept fits all. The integration of technology for communication resonated with contemporary modes of interaction, acknowledging the need to adapt traditional communication forms to the digital age. This approach is particularly pertinent given the varying levels of comfort with technology across generations, offering a common ground for all family members to connect.

Moreover, the emphasis on game mechanics like customization, personalization, and the freedom to choose paths within the game underscored the participants' desire for experiences that are tailored to individual identities and preferences. This aspect of the game designs reflects a broader understanding of the need for personal expression within the family unit, catering to the individual while maintaining a sense of collective identity.

These workshopped concepts also highlighted the development of skills such as effective communication, empathy, and collaboration through gameplay pointed to a recognition of the broader impact of these games beyond mere entertainment. Such skills may not be vital for personal growth, but also for enhancing family dynamics, potentially contributing to the overall health and well-being of the community.

The self-determination dimensions of autonomy and choice in the games were also significant, where co-designers emphasized allowing players to express themselves

and engage in ways that felt natural and comfortable. This design aspect enhances the games' relevance and appeal, encouraging more genuine and meaningful interactions.

Additionally, the importance of relatedness and connection in the games was evident, with a focus on building relationships and finding common ground. This aspect of the game designs is crucial in creating an inclusive and supportive space that respects individual differences while promoting shared understanding and relatedness.

To conclude, results from applying the AGD Framework in this workshop explore concepts of serious games for cultural engagement and discussion. These findings may suggest a promising avenue for further research and development in this field, highlighting the need for 'nothing for us without us' approaches to bridge cultural and generational divides, and enhance mental health interventions.

Considerations for Future Game Designers

Based on our findings, we propose the following considerations for future game designers focusing on acculturative game design with the Latine community and beyond:

1. **Cultural Relevance:** Ensure that game content is deeply rooted in the cultural narratives and values of the target community.
2. **Participatory Design:** Involve community members in the design process to create games that resonate with their experiences and needs.
3. **Intergenerational Appeal:** Design games that facilitate communication and understanding across different generations.
4. **Customization and Personalization:** Allow for high levels of customization in games, enabling players to express their unique identities and preferences.
5. **Communication Skills Enhancement:** Focus on game mechanics that improve effective communication and empathetic understanding.
6. **Encourage Autonomy and Choice:** Provide players with the freedom to express themselves and engage in ways that feel natural to them.
7. **Relationship Building:** Emphasize relationship building and finding common ground within the game environment.
8. **Flexibility in Design:** Allow for different modes of play, supporting both individual and collaborative experiences.
9. **Educational Value:** Incorporate elements that educate on cultural norms and encourage reflection on identity and acculturation.
10. **Therapeutic Elements:** Explore the integration of therapeutic concepts into game design to support mental health and well-being.
11. **Continuous Feedback:** Implement a feedback loop with community stakeholders to refine and adapt game designs over time.

Limitations and Future Work

As with any study, our study is not without limitations. The primary constraint was time, which not only affected the depth of collaboration, as seen with Group 1, but also potentially limited the scope of the game designs produced. Future studies

might explore the outcomes of the AGD Framework application over longer periods, allowing for a more in-depth development process.

Additionally, the study was limited to a workshop setting, which may not fully capture the complexity and ongoing nature of acculturative stress. Long-term engagement with the AGD Framework in various contexts, including at home and in community settings, could provide a more comprehensive understanding of its effectiveness.

The concepts generated from this study may pave the way for future research to explore how serious games designed using the AGD Framework can be implemented and their impact on actual stress mitigation with the Latine community. Further research could also delve into how these games are received by broader audiences within the Latine community and beyond towards the effectiveness in promoting broader cultural understanding and empathy.

CONCLUSION

In conclusion, this article presents the outcomes of a workshop study that piloted the Acculturative Game Design (AGD) Framework, adapted for use on a Miro board. Participants from the Latine community utilized this framework to develop their own game designs, aiming to address the unique cultural and communicative challenges within their community.

The game concepts created in this workshop illustrated intricate dynamics characteristic of Latine intergenerational relationships. Key themes such as open-mindedness, mutual effort, respect, and the importance of shared experiences were prevalent. These generated concepts also integrated elements that promoted both direct and indirect communication strategies, catering to diverse technological comfort levels across generations. The emphasis on customization and personalization in the designs reflected the participants' desire for experiences that resonate with individual identities, while fostering collective family bonds.

Overall, the application of the AGD Framework in this first-ever workshop invites further investigation in exploring serious games towards addressing acculturative stress and nurturing family dynamics in culturally diverse communities. The study not only contributes to the understanding of culturally sensitive game design but also provides recommendations for future research in developing serious games that can bridge cultural and generational divides, ultimately contributing to the well-being and cohesion of the community. This is only just the beginning.

Endnotes

1. Latine is used to inclusively describe all individuals traditionally referred to as Latino/a/x or Hispanic. This term is preferred over 'Latinx,' which can be linguistically challenging in Spanish.
2. Due to limited space in this paper, for more extensive details on the AGD Framework, please refer to the journal article by Conde et al. 2023.

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APPENDIX

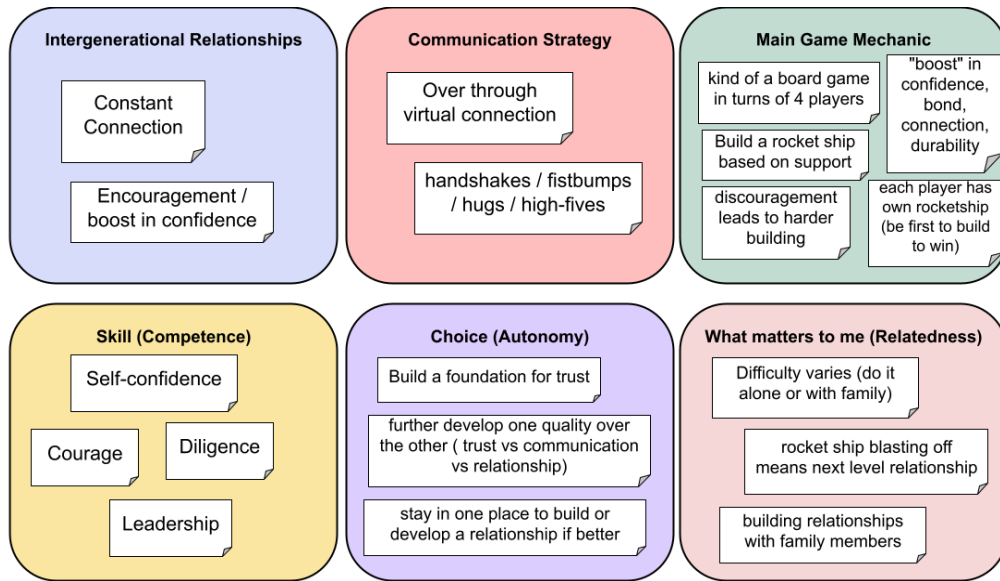


Figure 4: Full design concepts of Group 1.1

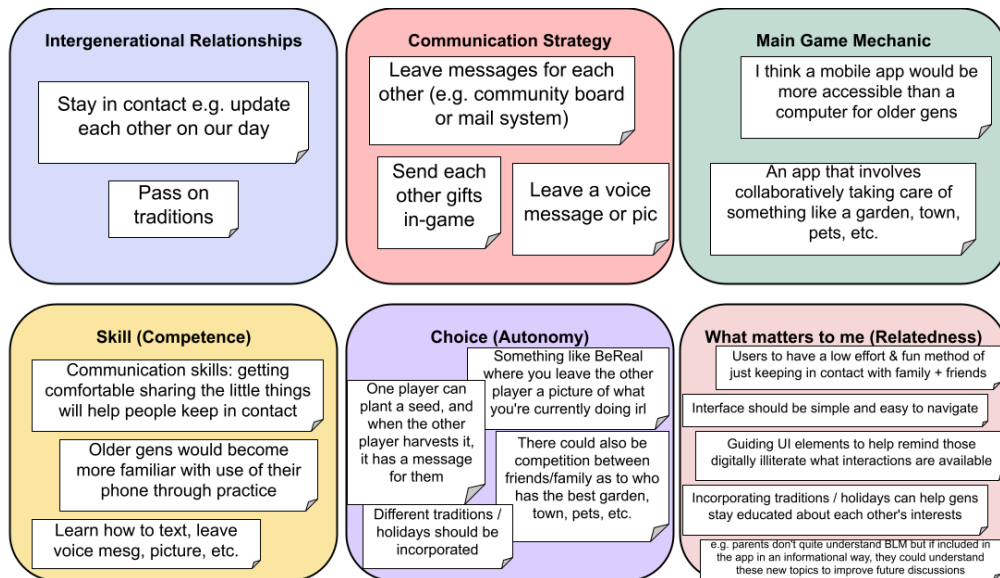


Figure 5: Full design concepts of Group 1.2

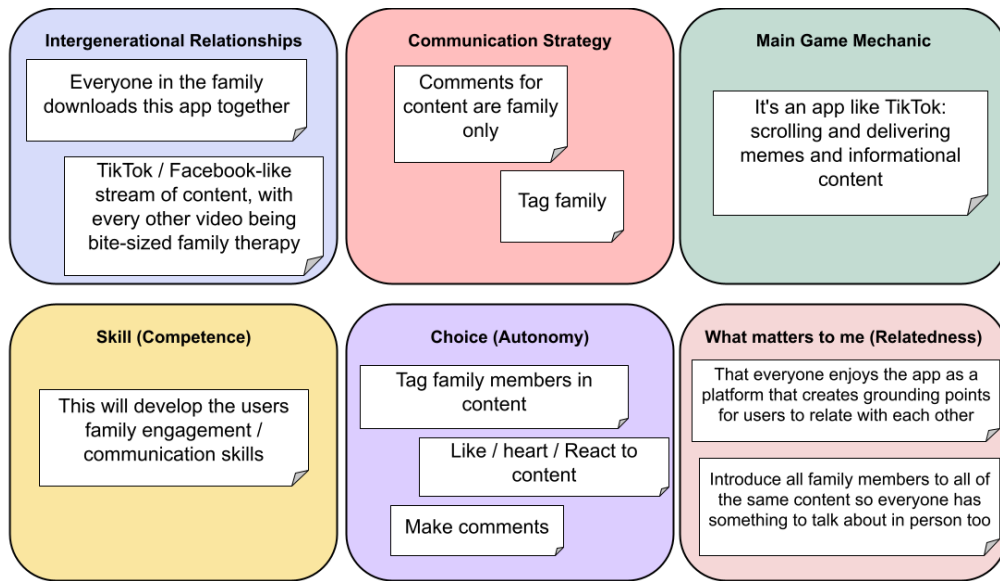


Figure 6: Full design concepts of Group 1.3

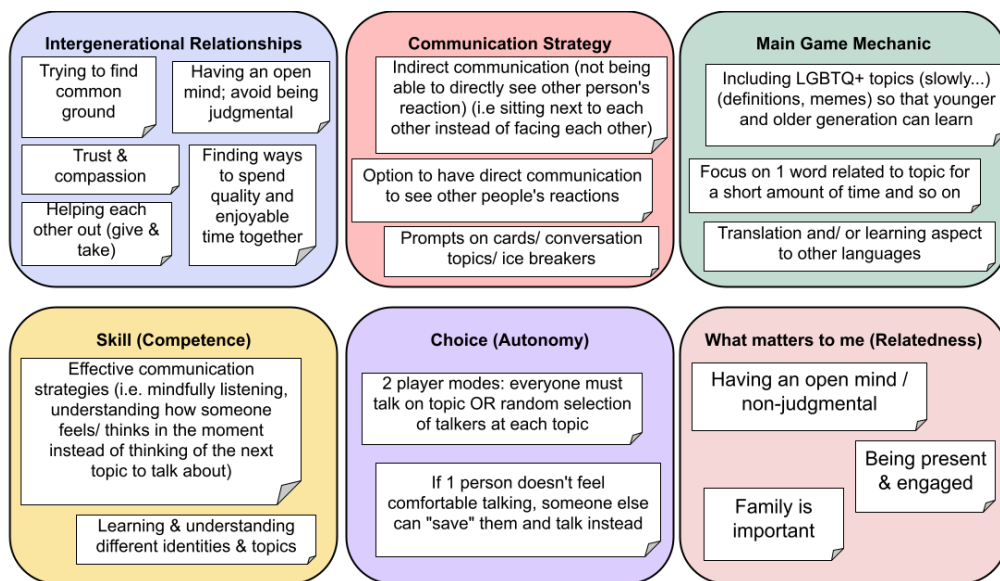


Figure 7: Full design concepts of Group 2

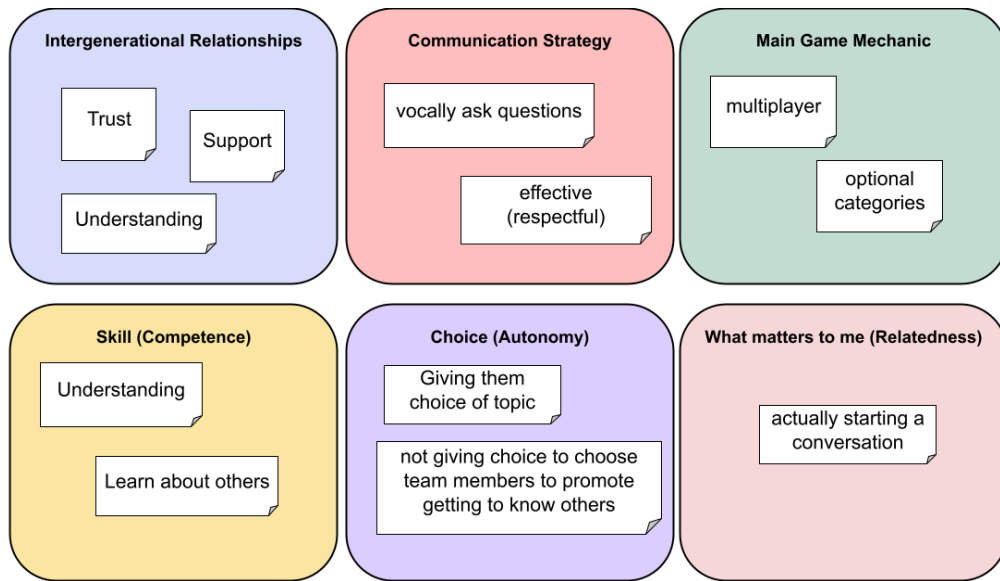


Figure 8: Full design concepts of Group 3

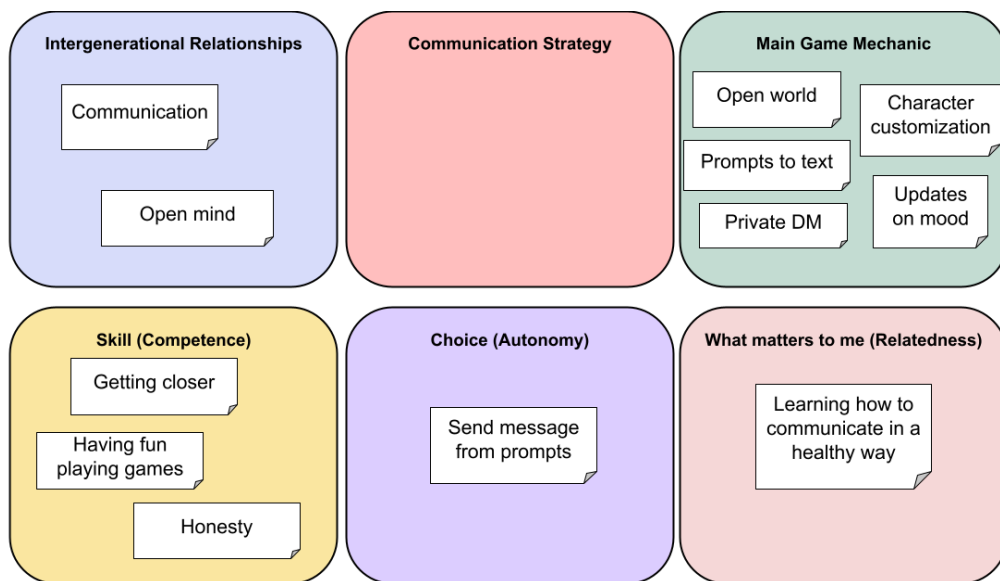


Figure 9: Full design concepts of Group 4

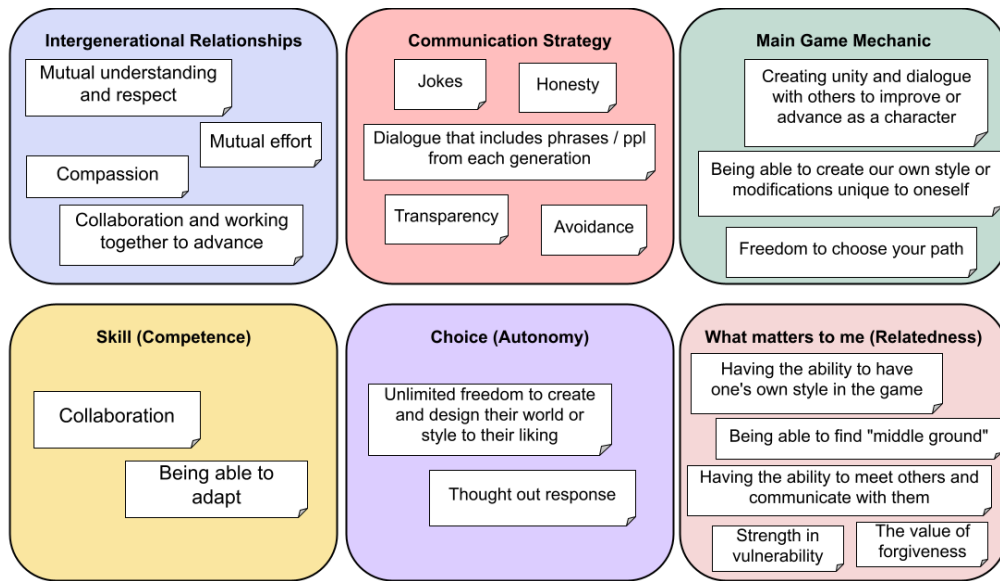


Figure 10: Full design concept of Group 5