

# Party Games as a Crossroad Between Strangers: A Mixed-Methods Study

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## ABSTRACT

Gameplay has a promising history of being the crossroad where strangers encounter each other and develop social connection by playing together. Diverse forms of play such as Game communities (Kahlbaugh 2011), Massive Multiplayer Online games (Kaye et al. 2017) and Pokémon Go (Vella et al. 2019), have all been shown to improve social connection. This is a critical topic of study as loneliness is a major mental health crisis (Cacioppo & Hawkley 2009) and “social support networks” are a key determinant of health (WHO, 2024). There are also numerous unanswered questions about how games and play may enable social connection. A recent overview on social connection in games concluded major gaps in the literature included unconventional games, including leisure, light or party games, and diverse player groups (Gonçalves et al. 2023).

This text contributes to the promising literature of games as a point of socially connecting encounter through a mixed methods intervention where two strangers played 60 minutes of party games, in person, together. Our study approached party games as those designed specifically towards playful social connection (Masek & Stenros 2024). We furthermore studied the effect playfulness had on the intervention as it has recently been seen a potential important factor for game-based mental health studies (Masek 2023) as a moderator, mediator, or outcome variable (Shen &

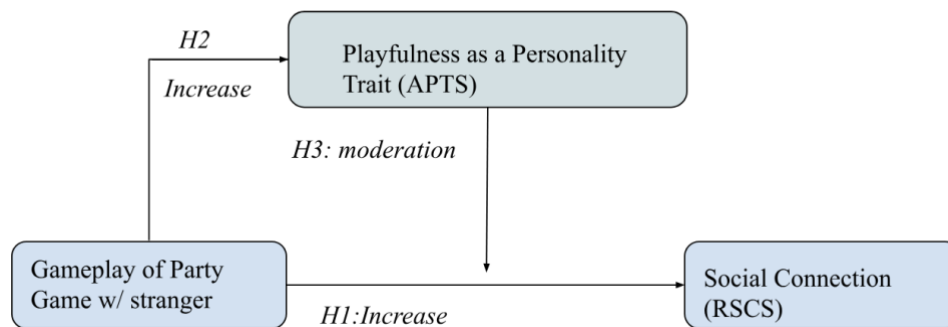
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Masek 2024). We report our quantitative findings of a before-and-after trial design where participants answered the Revised Social-Connectedness Scale (RSCS; Lee & Robbins 1998) and the Adult Playfulness Trait Scale (APTS; Shen, Chick, & Zinn 2014). Participants were also interviewed, but the qualitative data is still being analyzed.

## Theoretical Paradigm

Based upon past work we constructed three hypotheses. Firstly, we hypothesized that following a 60-minute gameplay experience, participants would have statistically higher degrees of perceived social connection, as measured by the RSCS, as compared to their day so far (H1). Secondly, based on past evidence that playful experience may increase perception of playfulness as a personality trait (Proyer et al. 2021), we predicted that gameplay would increase Playfulness as measured by the APTS (H2). Thirdly, we hypothesized that APTS would act as a moderator on the effect that gameplay experience would have on RSCS, in plain terms that more playful people would see a larger increase in social connection from playing the game (H3). See Figure 1. for our theoretical paradigm.



**Figure 1:** Theoretical Paradigm

## Recruitment/Participants

Participants (N=30) were recruited through a public space at a mid-sized university in Finland called the *Oasis Space* and an email to a volunteer group called the DMLab Pool (Greiner 2015). Participants were ages 20-54, though most frequently young adults (Average=29.5). They were highly educated with 66% having a partial or completed Master's or Doctoral degree and with all having at least a partial Bachelor's. None of them knew the purpose of the study, only that they would be playing a video game with a stranger for an hour. A Majority (73%) of participants identified as Male, with 20% identifying as Female and 7% identifying as non-binary or gender-fluid. Participants were highly culturally diverse, describing themselves as coming from 17 different national/cultural backgrounds. All participants spoke English, but they were allowed to speak any language they felt most comfortable with during gameplay.

## Gameplay

Participants were placed in 15 pairs, and experienced 30 minutes each of two different Nintendo designed and advertised "party games" (Nintendo.com). In a randomized order they either played a series of rounds of *Super Smash Brothers*, which was originally released as a party game (Taelman 2015), in a series of competitive matches,

or select missions from Nintendo's *Mario Party*, designed with party mini-games (Polinsky 2019) chosen for their cooperative/collaborative design. During gameplay, participants were adjacent to each other physically, in a publicly known room. They were told they may talk or play "any way they would normally", and change any difficulty settings/change game levels if they so wish.

## Preliminary Results

We utilized a paired T-Test to measure changes in social connection and playfulness. We found a statistically significant ( $p < .01$ ) increase in RSSC after as compared to before the experience. The average mean before gameplay for RSSC was 33.3 (St. dev.= 7.9) and after was 37.8 (St. dev.= 6.7) with a resulting increase of 4.47 in social connection (95% confidence interval from 7.47 to 1.60), with a t-score of 3.16 and cohen's d of .61 indicating a medium or large effect size (Becker 2000). The APTS pre-gameplay had a mean of 64.2 (St dev=9.6) and a post-gameplay mean of 68 with a statistically significant increase of 3.77 (95% CI of 2.24-5.29,  $p < .01$ ) and a t-score of 5.04 and a cohen's d of .39 indicating a medium sized effect. In this way, playing the game appeared to significantly increase participants' sense of social connection, and playfulness as a personality trait.

In order to test for an interaction between APTS and the intervention, we followed the guidance of Baron & Kenny (1986) and conducted an ANOVA with interaction. We found a statistically-significant difference in SSSC from both the intervention ( $F(1) = 3.997$ ,  $p = .05$ ) and by the APTS ( $F(1) = 5.598$ ,  $p < .05$ ), though the interaction between the terms was not significant. In this way, while both playfulness and the gameplay experience were significantly associated with higher social connection, we did not find any evidence that the participants degree of playfulness changed the degree of effect playing the game had on their perceived social connection.

## Discussion and Conclusion

While still preliminary, these results provide valuable data on what are the processes and health benefits for encountering strangers in a co-located game experience. In a matter of 60 minutes, two strangers playing party games statistically increased their perceived social connection and playfulness. There is still considerable work to be done in understanding why, when and how gameplay experiences between strangers can enable social connection and relieve loneliness, but this is an important step in establishing the value games can play in social health and wellbeing

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