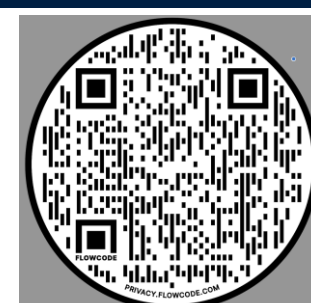


Effect of a Virtual Game, "Name That Band," on Elders' and PharmD Students' Feelings of Social Isolation During COVID-19

Alison M. Weygint, Brooke T. Whittington, Jeannie K. Lee, PharmD, BCPS, BCGP, FASHP, Ashley M. Campbell, PharmD, BCPS
The University of Arizona R. Ken Coit College of Pharmacy



INTRODUCTION

- ❖ Coronavirus disease 2019 (COVID-19) pandemic has brought on many unforeseen consequences, including the feeling of isolation and loneliness.
- ❖ St. Luke's Home is an Eden Alternative assisted living facility for low-income elders in Tucson, Arizona.
- ❖ Both older adults and PharmD students have isolated themselves from others in an effort to avoid the repercussions of COVID-19.¹
- ❖ With proper access to technology, older adults and PharmD students may be able to have safe, contactless social interactions using virtual platforms during the pandemic.²

OBJECTIVES

- ❖ The purpose of this study was to determine the effects of playing a virtual game, "Name That Band," on St. Luke's Home elders' and the University of Arizona PharmD students' feelings of social isolation during the COVID-19 pandemic.

METHODS

- ❖ This was a pre-post survey study that used data obtained from questionnaires before and after playing a virtual game, where participants guessed the band names of popular songs.
- ❖ Eligibility criteria: resident at St. Luke's Home in Tucson, Arizona or enrolled in the PharmD Program at the University of Arizona College of Pharmacy in the spring of 2021.
- ❖ The survey contained questions regarding participants' mood on a typical day, levels of social interaction, levels of technology use, questions from the Modified UCLA Three-Item Loneliness Scale³ (see below), demographics and questions about the game. These questions were specific to before the COVID-19 pandemic, pre-game and post-game.
 - ❖ How often do you lack companionship?
 - ❖ How often do you feel left out?
 - ❖ How often do you feel isolated from others?
- ❖ The total Modified UCLA Three-Item Loneliness Scale scores (minimum score of 3, indicating less loneliness & maximum score of 9, indicating more loneliness) before COVID-19 vs. pre-game and pre-game vs. post-game were expressed with medians and interquartile ranges and compared using a Wilcoxon Signed-Rank Test. The a-priori p-value was 0.05.

RESULTS

Table 1: Demographics

Characteristic	Elder	Student
Total, N	15	11
Age, N (%)		
20-30		10 (90.9%)
> 30		1 (9.1%)
< 65	1 (6.7%)	
65-75	9 (60%)	
> 75	5 (33.3%)	
Gender, N (%)		
Male	1 (6.7%)	1 (9.1%)
Female	14 (93.3%)	10 (90.9%)
Length of Residence at St. Luke's Home, N (%)		
< 1 year	5 (33.4%)	
1-3 years	6 (40%)	
3-5 years	2 (13.3%)	
> 5 years	2 (13.3%)	
Graduation Year, N (%)		
2022		2 (18.2%)
2023		5 (45.4%)
2024		4 (36.4%)
Participated in "Name That Tune" virtual game in the past, N (%)		
Yes	5 (33.3%)	9 (81.8%)
No	9 (60%)	2 (18.2%)
Unknown (did not respond)	1 (6.7%)	

Table 2: Total UCLA Loneliness Scale Score Median and Interquartile Range (IQR) Before COVID-19 vs. Pre-Game and Significance

	Before COVID-19 (median [IQR])	Pre-Game (median [IQR])	p-value ^a
Elders	3 [3-6.5]	4 [4-6]	0.886
Students	4 [3-6]	6 [6-7]	0.017

^ap-value is for a Wilcoxon Signed-Rank Test.

Table 3: Total UCLA Loneliness Scale Score Median and Interquartile Range (IQR) Pre-Game vs. Post-Game and Significance

	Pre-Game (median [IQR])	Post-Game (median [IQR])	p-value ^a
Elders	4 [4-6]	3 [3-4.75]	0.020
Students	6 [6-7]	6 [3.5-6]	0.090

^ap-value is for a Wilcoxon Signed-Rank Test.

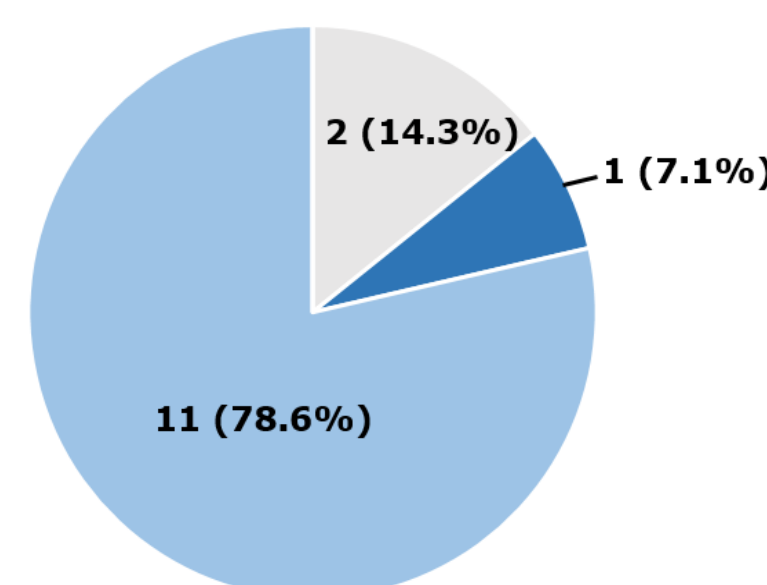


Figure 1: Aspect of the Activity That Made Elders Feel More Socially Engaged

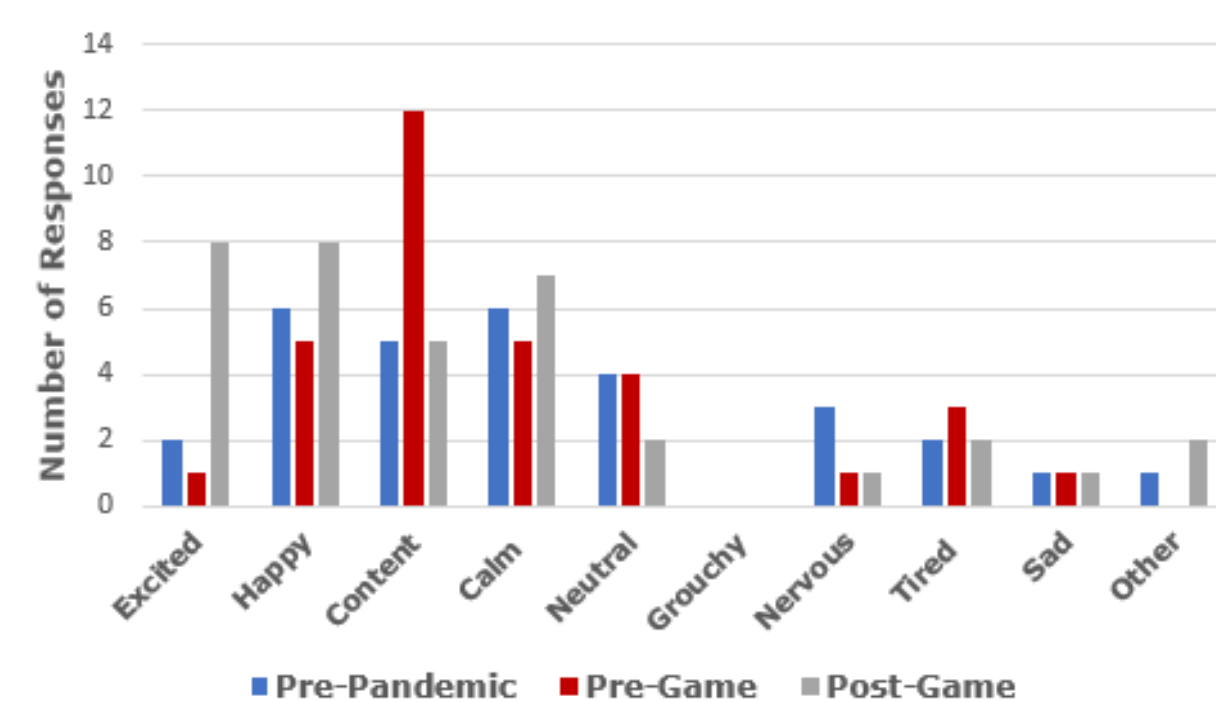


Figure 3: Elders' Reported Moods Pre-Pandemic, Pre-Game and Post-Game

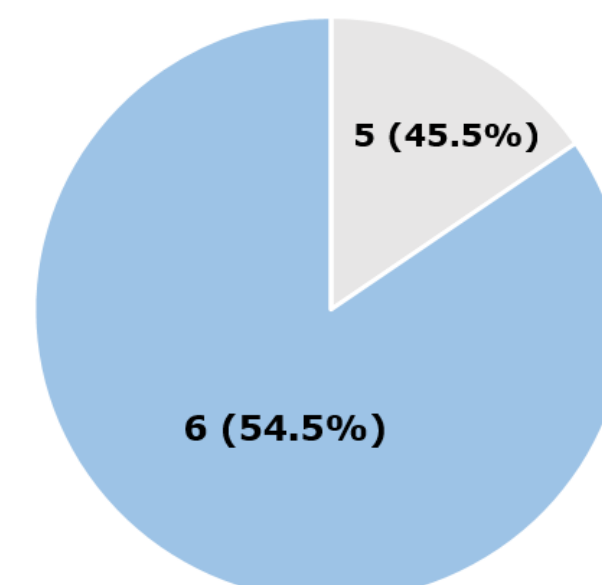


Figure 2: Aspect of the Activity That Made Students Feel More Socially Engaged

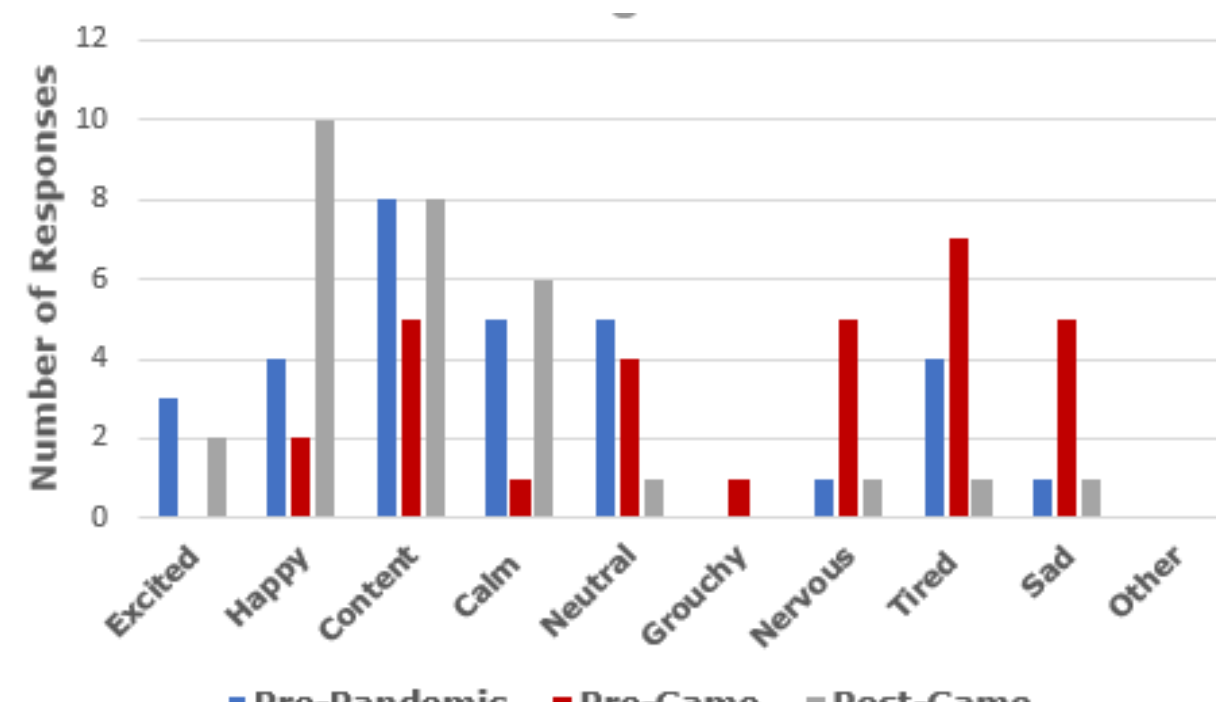


Figure 4: Students' Reported Moods Pre-Pandemic, Pre-Game and Post-Game

DISCUSSION/IMPLICATIONS/LIMITATIONS

- ❖ Elders experienced a significant improvement in Modified UCLA Three-Item Loneliness Scale scores after playing the virtual game compared to before.
- ❖ Students experienced a significant worsening in Modified UCLA Three-Item Loneliness Scale scores during the COVID-19 pandemic than before the pandemic.
- ❖ A higher percentage of elders reported feeling 'happy' and 'excited' after playing the game than before playing the game. More students felt 'happy' and less students felt 'tired' after playing the game.
- ❖ The aspect of the activity that helped elders and students feel more socially engaged was playing a game, implying that innovative, virtual game social interventions may have a role in decreasing feelings of isolation and increasing engagement.
- ❖ Limitations include a small sample size, elders' lack of access to their own technology and potential recall bias since the intervention took place in April of 2021, over a year after the pandemic was declared.

CONCLUSIONS

- ❖ Virtual game social interventions may have a role in decreasing feelings of isolation and increasing engagement in older adults and PharmD students during the pandemic.

ACKNOWLEDGEMENTS

- ❖ Many thanks to Sally Krommes, the former programs coordinator at St. Luke's Home.

REFERENCES

- Wu B. Social isolation and loneliness among older adults in the context of COVID-19: a global challenge. *glob health res policy*. 2020;5(1):27.
- Smith B, Lim M. How the COVID-19 pandemic is focusing attention on loneliness and social isolation. *Public Health Res Pract*. 2020;30(2).
- Hughes ME, Waite LJ, Hawkey LC, Cacioppo JT. A short scale for measuring loneliness in large surveys: results from two population-based studies. *Res Aging*. 2004;26(6):655-672.