Swipe for Heartfelt Connections: An Examination of Physiological Effects of Swiping on Dating Applications

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Introduction

- Online dating has completely transformed the modern-day dating scene. Applications come in many forms, however, this study primarily used Tinder.
- An ever-increasing popularity of applications have caused online dating to become one of the most common ways of pursuing relationships. 40% of single adults seek partners through an app and 25% of new couples have met on one (Castro *et al.*, 2020).
- Online experiences hold the ability to cause physiological responses in reaction to changes in emotion or mental stressors (Porter *et al.,* 2019).
- People use online dating applications to speed up the dating process as well as for convenience.

Methods

- Participants were required to complete an online Qualtrics survey before participating in the research study to collect information (demographics, attitude towards romantic relationships and dating apps, past relationship history, current dating app activity, and emotional well-being).
- After completion of the survey, participants met in person with a research assistant.
- The participants were instructed to wear a heart monitor for the duration of the study (30 minutes).
- The participants utilized their dating app of choice for 15 minutes while the research assistant recorded their heart rate every 3 minutes utilizing the heart monitor.
- While the participant used their dating app, the research assistant tallied the number of swipes left, right, and matches on the participant's dating application.
- For the remaining 15 minutes, the participant sits patiently as the research assistant records their heart rate every 3 minutes outside of the room.
- The research assistant recorded the respective participant's systolic over diastolic blood pressure at 0, 15, and 30 minutes.

Results

- Participants: N = 30 (24 female, 6 male)
- The data suggests some physiological health implications due to dating application use (augmented heart rate and systolic blood pressure).

Correlations

- Using a dating application to make time pass when bored is positively correlated with not going on a first date with someone met through a dating application. (p= 0.028)
- Little to no correlation between levels of seriousness within previous relationships and systolic or diastolic blood pressures while swiping. (p= 0.931 , p= 0.705, respectively)
- Using a dating application for flirting/social skills is positively correlated with using dating applications for sexual experience. (p= 0.002)
- Overall, swiping right was positively correlated with systolic blood pressure at the 15 and 30 minute marks.
- Two attachment types, anxiety and avoidance, were tested as moderators but were found to be insignificant.
- There is a positive correlation between using a dating application for entertainment and social acceptance (p = <.001)

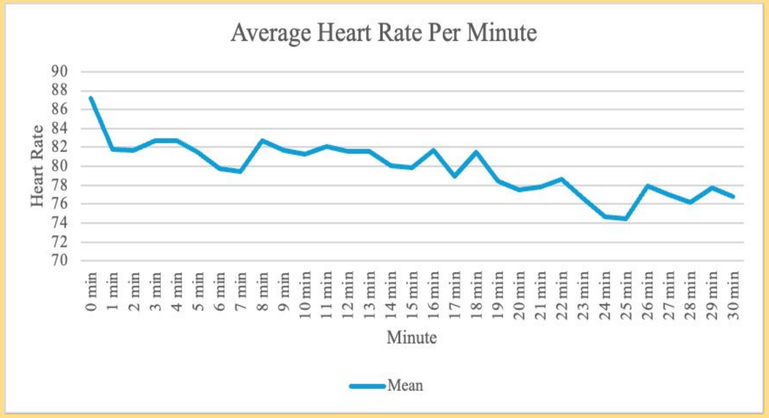

Figure 1. The graph depicts the average heart rate per minute over the course of the 30 minute experiment, for all participants. It gradually decreases over time.

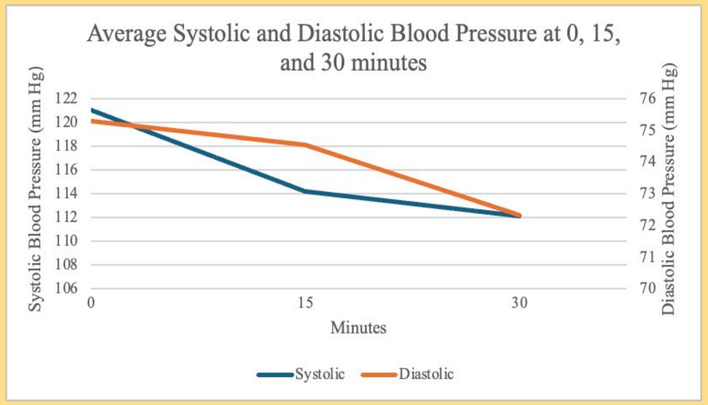

Figure 2. The graph illustrates how average systolic and diastolic blood pressure decreased at 0, 15, and 30 minutes.

Discussion

- Consistent changes within blood pressure and heart rate readings within the experimental group in comparison to much less, if any, changes to readings within the control group suggests that the body may react physiologically to stimuli produced by dating application usage.
- Study limitations: small sample size, predominantly female participants, and lack of established causation.

References

- Castro, Á., & Barrada, J. R. (2020). Dating apps and their sociodemographic and psychosocial correlates: A systematic review. *International Journal of Environmental Research and Public Health*, *17*(18), 6500.
- Porter, A. M., & Goolkasian, P. (2019). Video games and stress: How stress appraisals and game content affect cardiovascular and emotion outcomes. *Frontiers in Psychology*, *10*.