

ASSESSING GAMBLING MOTIVES AND IMPULSIVITY IN GAMBLERS WHO DO AND DO NOT PURCHASE LOOT BOXES

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INTRODUCTION

- In video games, loot boxes are virtual containers of in-game goods (e.g., avatar modifications, weapons, armour, etc.) that players can pay for using real money.
- Loot box contents are random, and the value of the contents is unknown at the time of purchase. Consequently, there is growing concern that paying for loot boxes is akin to gambling.
- Although the convergence of video gaming and gambling is a nascent area in gambling research, loot box purchasing being linked to both problematic video gaming and gambling behaviours have been relatively consistent findings.
- Gambling motives (e.g., escape), and impulsivity have been associated with disordered gambling, however, there is a paucity of research that has examined gambling motives and impulsivity as they relate to loot box purchasing.

OBJECTIVES

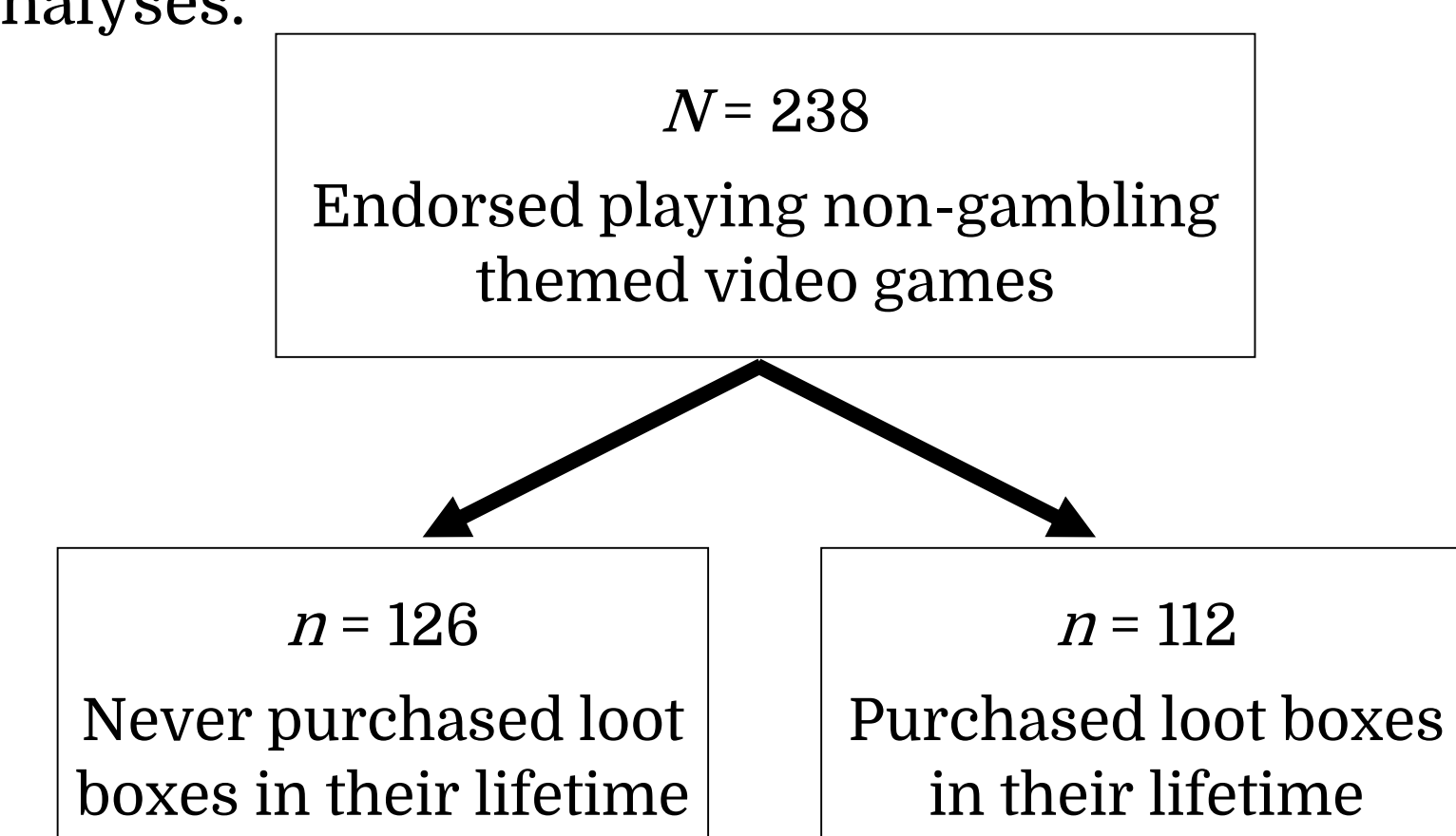
- Examine whether a replication of past research findings regarding problem gambling severity and video gaming severity would be found among loot box purchasers.
- Explore whether different gambling motives, and trait impulsivity would be notable characteristics among loot box purchasers.

HYPOTHESES

- Relative to those who had never purchased loot boxes in their lifetime, those who had would report:
 - (H1) Greater problem gambling severity
 - (H2) Greater problem video gaming severity
 - (H3) Higher gambling motive scores
 - (H4) Greater levels of impulsivity

METHODS

- Current gamblers (defined as having gambled within the last three months) were recruited for a larger study investigating relationships between online gaming and gambling. $N = 238$ met inclusion criteria for the present analyses.



- Self-report measures completed by all participants
 - Problem Gambling Severity Index (PGSI; H1)
 - Gaming Addiction Inventory for Adults (GAIA; H2)
 - Gambling Outcome Expectancies Scale (GOES; H3)
 - UPPS-P Impulsive Behaviour Scale (UPPS-P; H4)
- Statistical analyses
 - Mann-Whitney U tests
 - Chi square test of independence

RESULTS: GAMBLING SEVERITY AND MOTIVES, VIDEO GAMING SEVERITY, AND IMPULSIVITY

*, **, and *** indicate statistically significant differences between groups, $p < .05$, $p < .01$, and $p < .001$ respectively.

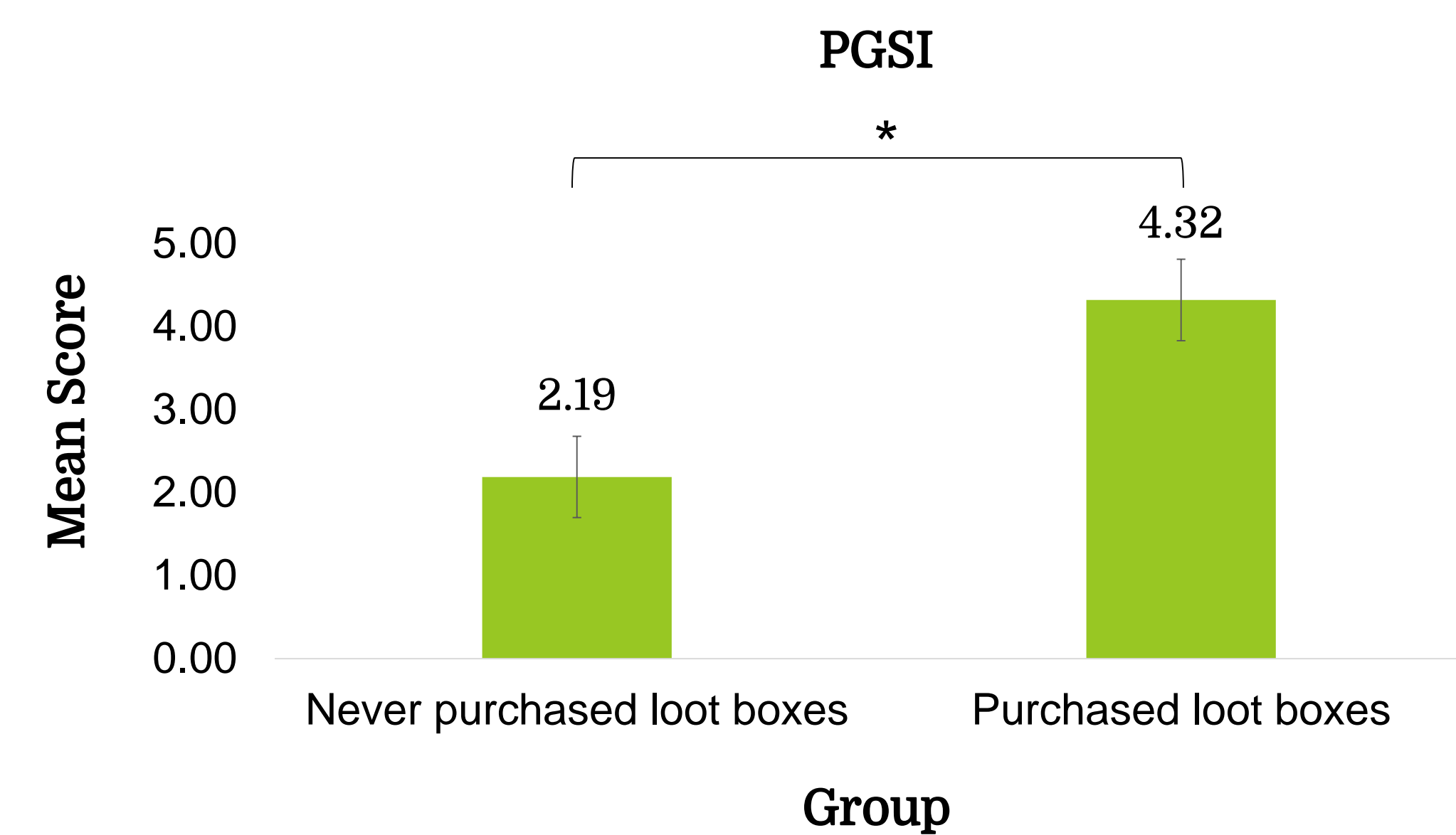


Figure 1. Mean Problem Gambling Severity Index scores. $U = 5514.5$, $p = .003$.



Figure 2. Mean addiction scores from the Gaming Addiction Inventory for Adults. $U = 4581.5$, $p > .001$.

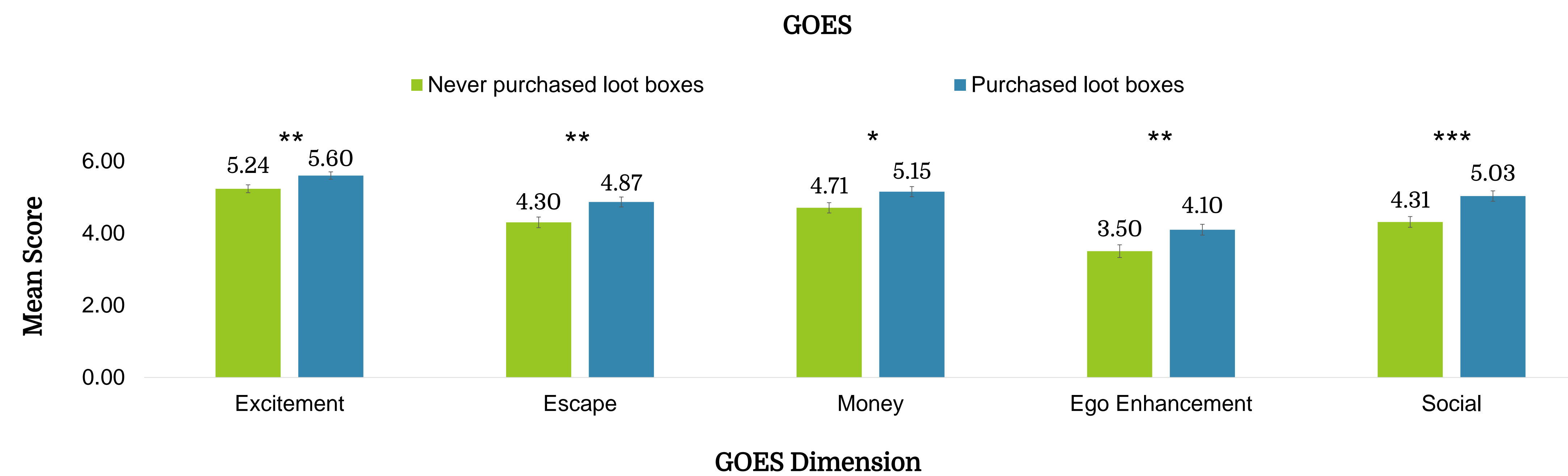


Figure 3. Mean Gambling Outcome Expectancies Scale scores. **Excitement:** $U = 5682.5$, $p = .009$; **Escape:** $U = 5508.5$, $p = .003$; **Money:** $U = 5836.5$, $p = .021$; **Ego enhancement:** $U = 5657.0$, $p = .008$; **Social:** $U = 4998.5$, $p < .001$.

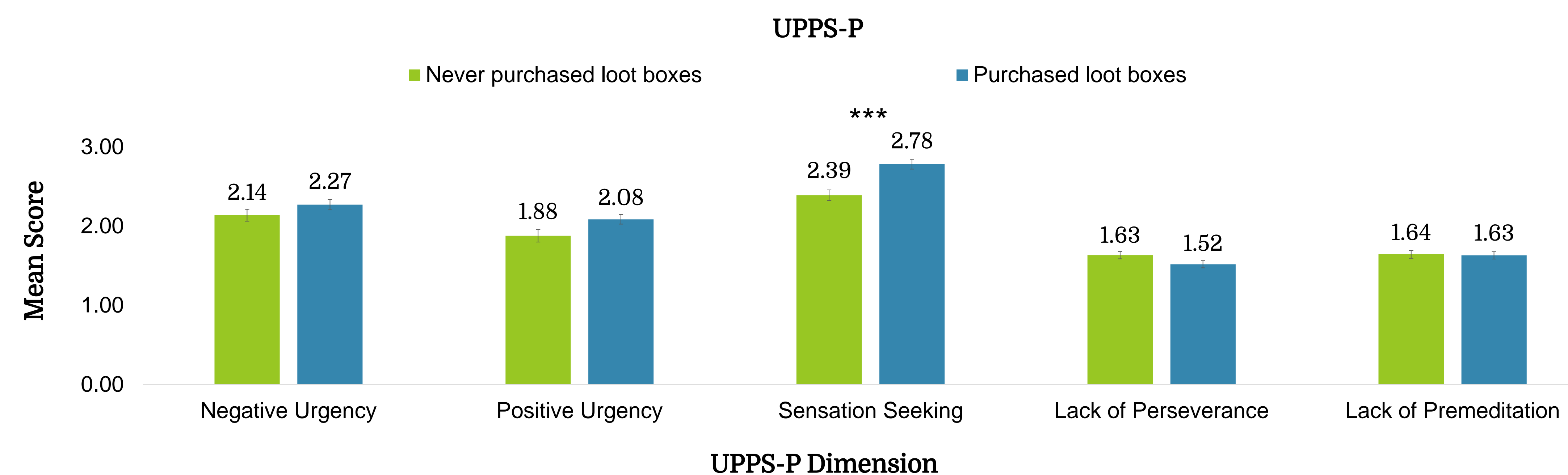


Figure 4. Mean trait impulsivity scores. **Negative Urgency:** $U = 6389.8$, $p = .206$; **Positive Urgency:** $U = 6140.0$, $p = .082$; **Sensation Seeking:** $U = 4857.0$, $p < .001$; **Lack of Perseverance:** $U = 6091.5$, $p = .065$; **Lack of Premeditation:** $U = 6966.0$, $p = .863$.

RESULTS: DEMOGRAPHICS

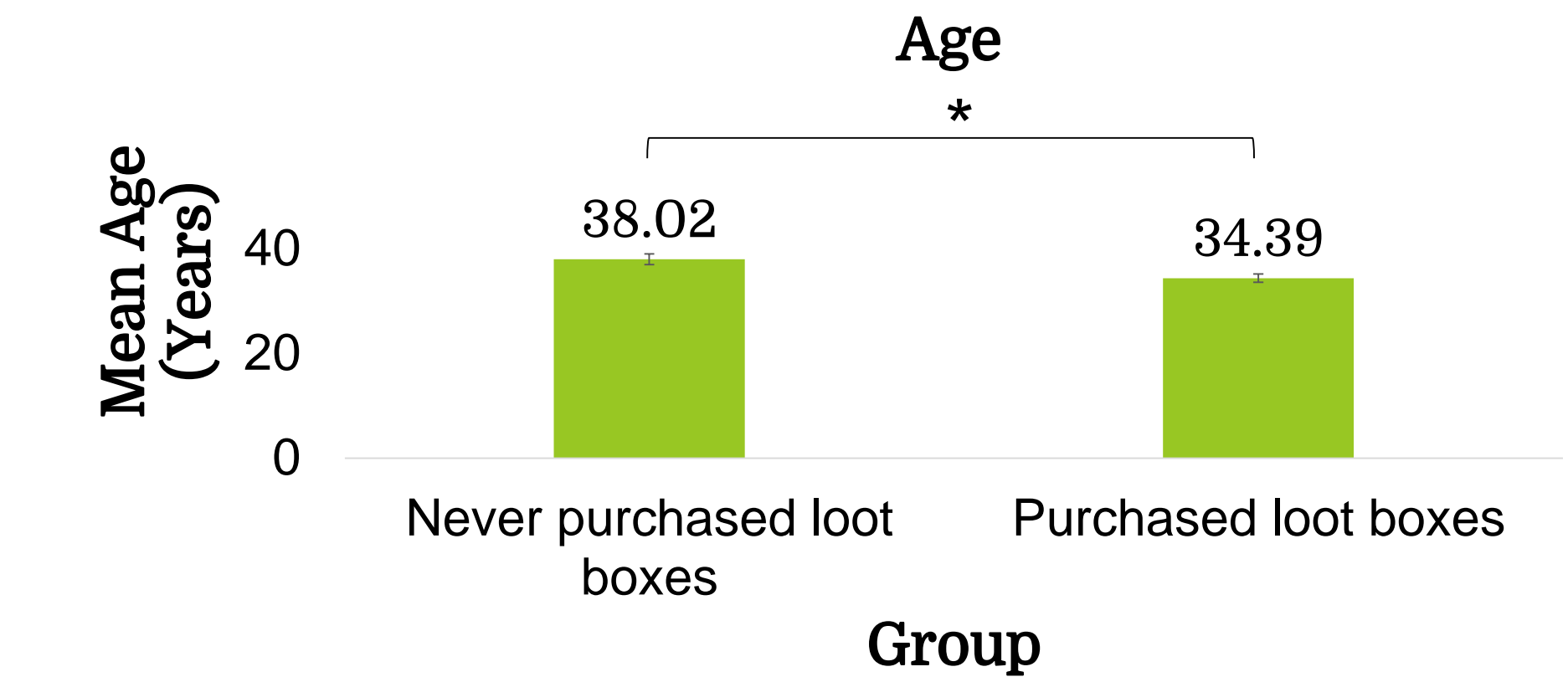


Figure 5. Mean age of loot box and non-loot box purchasers. $U = 5876.5$, $p = .026$.

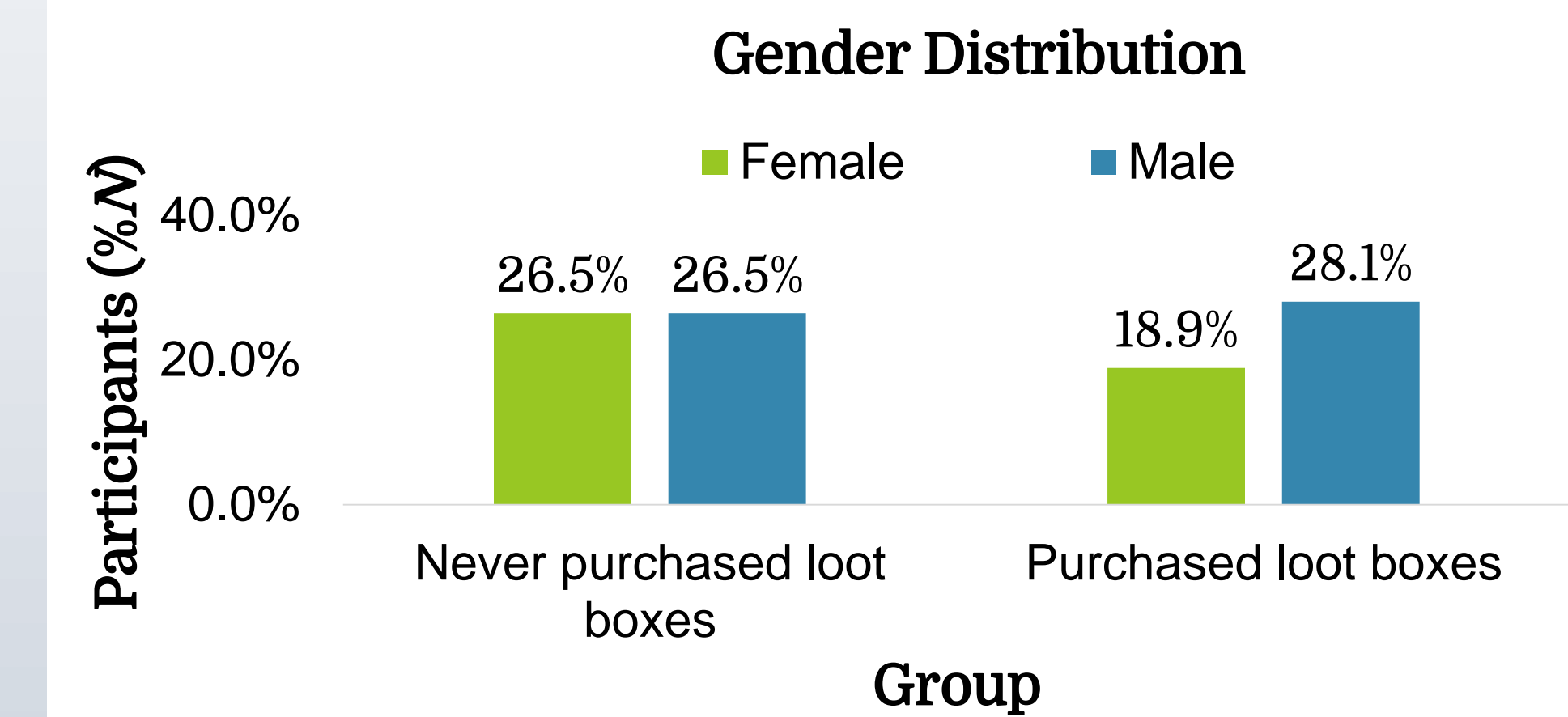


Figure 6. Percentage of male and female loot box and non-loot box purchasers (percentage of total sample; $N = 238$). $\chi^2(1, N = 238) = 2.3$, $p = .129$.

SUMMARY & FUTURE DIRECTIONS

- In support of all of our hypotheses, compared to those who had never purchased loot boxes in their lifetime, those who had:
 - Reported greater problem gambling severity (H1) and problem video gaming severity (H2). This is also in line with previous research findings.
 - Reported greater endorsement of excitement, escape, financial, ego enhancement, and socialization motives for gambling (H3).
 - Reported greater levels of impulsivity, however, the only significant difference was in sensation seeking (H4).
- Additionally, those who had purchased loot boxes were significantly younger (figure 5), and more likely to be male (figure 6), however, gender differences were not statistically significant.
- These results suggest exploration of the roles of gambling motives and impulsivity in the video gaming-gambling link is warranted as an avenue of more in-depth research.
- Further investigation can help to shed light on whether loot box purchasing may be driven by the same psychological dispositions that are associated with disordered gambling, and who may be most at risk of experiencing harms related to loot box use.



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