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Short Communication

Do romantic partners influence each other's heavy episodic drinking? Support for the partner influence hypothesis in a three-year longitudinal study

Sara J. Bartel [a,*], Simon B. Sherry [a], Danielle S. Molnar [b], Aislin R. Mushquash [c], Kenneth E. Leonard [d,e], Gordon L. Flett [f], Sherry H. Stewart [g]

[a] Department of Psychology and Neuroscience, Dalhousie University, Life Sciences Centre, 1355 Oxford Street, PO BOX 15000, Halifax, NS B3H 4R2, Canada
[b] Brock University, Department of Child and Youth Studies, 1812 Sir Isaac Brock Way, St. Catharines, ON L2S3A1, Canada
[c] Lakehead University, Department of Psychology, 955 Oliver Rd., Thunder Bay, ON P7B5E1, Canada
[d] University of Buffalo, Department of Psychology, 12 Capen Hall, Buffalo, NY, USA
[e] University of Buffalo, Department of Psychiatry, 12 Capen Hall, Buffalo, NY, USA
[f] York University, Department of Psychology, 4700 Keele St., Toronto, ON M3J1P3, Canada
[g] Department of Psychiatry, Dalhousie University, 5909 Veterans' Memorial Lane, 8th Floor, Abbie J. Lane Memorial Building, QEII Health Sciences Centre, Halifax, NS B3H 2E2, Canada

HIGHLIGHTS

- Partner influence on HED occurs over the long term and applies to partners in varying stages of serious romantic relationships.
- Women influence their partners' HED just as much as men influence their partners' HED.
- Men and women appear to engage in HED because they have a pattern of HED in their past.
- Men and women appear to engage in HED because they enter into a "drinking partnership" which encourages HED.

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ABSTRACT

Background: Approximately one in five adults engage in heavy episodic drinking (HED), a behavior with serious health and social consequences. Environmental, intrapersonal, and interpersonal factors contribute to and perpetuate HED. Prior research supports the partner influence hypothesis where partners influence each other's HED.
Objectives: We examined the partner influence hypothesis longitudinally over three years in heterosexual couples in serious romantic relationships, while exploring possible sex differences in the magnitude of partner influence.
Methods: One-hundred-and-seventy-nine heterosexual couples in serious relationships (38.5% married at baseline) completed a measure of HED at baseline and again three years later.
Results: Using actor-partner interdependence modelling, results showed actor effects for both men and women, with HED remaining stable for each partner from baseline to follow-up. Significant partner effects were found for both men and women, who both positively influenced their partners' HED over the three-year follow-up.
Conclusions: The partner influence hypothesis was supported. Results indicated partner influences on HED occur over the longer term and apply to partners in varying stages of serious romantic relationships (e.g., cohabiting, engaged, married). Women were found to influence their partners' HED just as much as men influence their partners' HED. Findings suggest HED should be assessed and treated as a couples' issue rather than simply as an individual risky behavior.

1. Introduction

Heavy episodic drinking (HED) or "binge drinking", defined as consuming at least four drinks for women (or five drinks for men) on a single occasion, is reported by about one in five adults every year (Bulloch

* Corresponding author.
E-mail address: Sara.Bartel@dal.ca (S.J. Bartel).

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et al., 2016). HED is tied to serious health, social and economic consequences (Plant et al., 2009). Although there is extensive research implicating intrapersonal factors in HED (Krank et al., 2011; Patrick and Schulenberg, 2010), there is a dearth of research investigating HED in romantic relationships.

1.1. Partner influence hypothesis (PINH)

People influence one another, and as the importance and immediacy of a group or individual increases, this influence becomes stronger (Latané, 1981). Forces of influence are especially strong within romantic relationships because these relationships are important, are predicated on mutual acceptance, and involve frequent exposure to the habits of one's partner.

As applied to HED, the PINH suggests men and women in romantic relationships influence one another's future HED (Mushquash et al., 2013). Within romantic relationships, women may discourage HED in men; for example, HED in a husband may be incompatible with his wife's social role expectations for him as a husband and/or father (e.g., Schou and Birkelund, 2015). Alternatively, women may increase their HED to match their heavier drinking male partners, with drinking occasions representing contexts where (for example) wives and husbands bond, relax, or socialize (e.g., Homish and Leonard, 2007). While both sex-specific effects and mutual partner influences are possible, mixed results about the sex-specific aspects of the PINH prevail. In a study of 497 couples, Leonard and Eiden (1999) found that only husbands' baseline HED influenced the HED of their wives over the first year of marriage. This finding was replicated by Leonard and Mudar (2004) in a study of 592 married couples; however, this pattern subsequently shifted within the first four years of marriage, with wives then influencing their husbands' drinking (Leonard and Homish, 2008). In another study of 489 married couples, husbands and wives reciprocally influenced the drinking of their partners over five years; however, after an additional five years, only wives influenced their husbands' drinking (Windle and Windle, 2014). In contrast, in a one-month study of 208 dating couples, Mushquash et al. (2013) found both men's and women's baseline HED influenced the future HED of their dating partner. Given these varying sex-specific findings, further investigation of the PINH appears warranted.

1.2. Advancing the literature on the PINH

Our objective was to examine the PINH longitudinally in couples in committed romantic relationships. Extant research focuses on young dating couples, newly married couples, or middle-aged married couples, meaning the PINH has yet to be studied in romantic partners in varying stages of a serious romantic relationship (e.g., cohabiting, engaged, married). Our study used a three-year, two-wave longitudinal design and the actor-partner interdependence model (APIM; Cook and Kenny, 2005) to advance research on partner influence on HED.

The APIM accounts for interdependence in dyadic relationships and assesses actor effects and partner effects. Actor effects measure the stability of one's own behavior over time, whereas partner effects measure the extent to which the past behavior of one partner predicts the future behavior of the other partner. By controlling for individual stability, a longitudinal APIM provides a stringent test of whether partners influence each other over time.

2. The present study

Our study tested two hypotheses regarding HED in partners in romantic relationships. Building on previous literature, we hypothesized male and female partners would demonstrate significant, positive actor effects for HED, indicating stability of HED over time. Additionally, we hypothesized men and women would display significant, positive partner effects for HED over a three-year interval. Given inconsistent findings relating to the sex-specific aspects of the PINH, questions of sex differences were considered exploratory

2.1. Participants

A sample of 297 heterosexual couples was recruited. We only included participants who met the eligibility criteria, had complete data on the measures of interest, and were still in a relationship with the same partner at time two (T2), resulting in a final sample of 179 couples (48 couples with missing data at T2, 69 couples not together at T2, and 1 couple that did not meet eligibility criteria were excluded). To be eligible, couples had to be in a relationship for at least six months, be at least 18 years old, and have access to the Internet with their own email addresses. At time one (T1), 69 (38.5%) couples were married, 15 (8.4%) were engaged, 35 (19.6%) were in a serious relationship, 36 (20.1%) were cohabiting, and 1 (0.6%) was dating. The relationship status of 23 couples (12.8%) was unclear because the responses of both partners did not match (e.g., one partner reported “in a serious relationship” while the other reported “married”). The average relationship length at T1 was 7.45 years (range 0.5–44.17 years).[1] At T1, the average age of women was 30 ($SD = 10$) years and the average age of men was 32 ($SD = 11$) years.

2.2. Measure

2.2.1. HED

Building on past research (e.g., Mushquash et al., 2013), HED was assessed using a continuous item (Molnar et al., 2010). In reference to the past year, participants were asked, “How often do you have five or more drinks on one occasion?” Participants were given seven response options ranging from “Never” to “Most days.” Participants were provided with a description of a standard drink.

2.3. Procedure and data analysis

Our study received ethical clearance from Brock University's research ethics board. Participants were recruited through posters and advertisements. At T1 and T2, members of each couple were instructed to complete a web-based questionnaire independently and asked not to discuss their participation with their partner. Once both partners had completed the questionnaires at each time point, $50 compensation was provided.

The APIM model in Fig. 1 was tested using Mplus 7.4 (Muthen & Muthen, 1998–2015). Actor and partner effects and patterns of association in the APIM were tested using k-statistics (Cohen, 1960). To minimize the influence of a few extreme cases on analyses, we replaced any values larger than three *SD*s above the group mean (1.54% of data) with the value equal to the group mean plus three *SD*s; three multivariate outliers were removed.

3. Results

Missing data were missing completely at random based on Little's MCAR test, $\chi^2 = 10.63$, $p = 0.22$. Small's omnibus test indicated our data were multivariate non-normal. Full-information maximum likelihood estimation procedures were employed and unstandardized estimates are presented. To address the non-normality, we conducted all analyses using bias-corrected bootstraps with 20,000-bootstrap samples (Nevitt & Hancock, 2001).

Means, standard deviations, and bivariate correlations for HED for each partner at each time point appear in Table 1. Consistent with hypotheses, actor effects for HED were positive and significant for both

[1] Values for relationship length was calculated by averaging the reports given by each member of the couple (partners' responses were significantly correlated, $p < 0.01$).