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Growth of Men's Alcohol Use in Early Adulthood: Intimate Partners' Influence

Hyoun K. Kim, Stacey S. Tiberio, Katherine C. Pears, Deborah M. Capaldi, and Isaac J. Washburn

Oregon Social Learning Center

Abstract

The present study examined the effects of intimate partners' alcohol use on the developmental trajectories of men's alcohol use across their early to late 20s. Longitudinal data from a community sample of 110 at-risk young men and their intimate partners were analyzed using latent growth modeling. Results indicated that, in general, men showed a significant linear decrease in alcohol use across their 20s as expected. However, partners' alcohol use had significant and positive effects on men's concurrent alcohol use across their 20s regardless of relationship status, even after taking into account autoregressive effects of men's own alcohol use and their antisocial behavior. Furthermore, a new partner's alcohol use had a significantly greater influence on the man's alcohol use in his late 20s compared to a partner's alcohol use from intact relationships. Findings from the present study highlight the importance of considering intimate partners' alcohol use as part of the proximal psychosocial environment influencing men's alcohol use during early adulthood. Implications for prevention and intervention efforts are discussed.

Keywords

at-risk; early adulthood; men's alcohol trajectories; partner influence

There is growing interest in the role of intimate partners in shaping individuals' risk behaviors (Capaldi, Kim, & Owen, 2008), particularly alcohol use (Fleming, White, & Catalano, 2010; Leonard & Homish, 2008; Leonard & Mudar, 2003). Within couples, one partner's alcohol use may play a significant role in the initiation, persistence, and exacerbation of the other partner's alcohol use (Leonard & Homish, 2008). Furthermore, in determining trajectories of early adult alcohol use, early risk factors (e.g., parental alcohol use) may be less influential than contemporary proximal contexts (Capaldi, Feingold, Kim, Yoerger, & Washburn, 2013). Thus understanding the course of such use over time within the couple context may be critical to alcohol abuse prevention and intervention.

Although beneficial effects of being married on alcohol use seem to be quite robust (e.g., Homish, Leonard, & Cornelius, 2007; Leonard & Eiden, 2007; Leonard & Rothbard, 1999; Merline, Schulenberg, O'Malley, Bachman, & Johnston, 2008), studies on longitudinal processes of partner influence on alcohol use during early adulthood (ages 20 through 29 years) are rare. An exception is Leonard and colleagues' work (e.g., Leonard & Homish, 2008; Leonard & Mudar, 2003, 2004). Using longitudinal data on a relatively large group of newlywed couples, they examined a model which posits that drinking behavior is determined by dynamic interactions between an individual's history of alcohol use, or ongoing alcohol trajectories, and new influences. From this perspective, marriage or a stable romantic relationship is posited to be one of the most important sources of psychological and social influence on drinking behavior (e.g., adoption of new roles as a partner, reorganization of and reduction in time spent with peers), which in turn might lead to reduction in alcohol use in adulthood (Leonard & Mudar, 2003). In particular, they found that wives' influence on husbands' alcohol use might become more significant as the marriage progresses and the wives' roles in caretaking and organizing social behaviors of the couples increase (Leonard & Homish, 2008; Leonard & Mudar, 2004).

Overall, these findings provide evidence of associations between men's and women's alcohol use within couples and women's influence over time on men's use. These findings, however, need to be considered with caution because they were derived from a sample of newly married couples, excluding previously married and cohabiting but unmarried couples. Furthermore, a majority of them (approximately 70%) completed college or higher levels of education. Whether women would have similar influences on their male partner's alcohol use when all types of intimate relationships are considered – including married, cohabiting, and unmarried dating partners – and whether there would be similar partner influence processes in community samples with lower levels of education and higher levels of risk behaviors need further examination.

Using a community sample of young men in an ongoing longitudinal study (the Oregon Youth Study or OYS) and their partners, the present study sought to fill these gap in the literature. The men were at risk in childhood for the development of antisocial behavior and substance use by virtue of the neighborhoods in which they lived, and they later showed relatively high levels of intimate partner aggression (Kim & Capaldi, 2004; Kim, Capaldi, & Crosby, 2007) as well as multiple relationship transitions (Kim & Capaldi, 2007). We examined whether the partner's influence on alcohol use evidenced in couples with middleclass backgrounds would be replicated in these at-risk men with varying types of relationships (married, cohabiting, and dating) and also whether such influence would vary across time and partner status (new versus intact partner) during early adulthood (ages 20 through 29 years).

First, we examined changes in the men's alcohol use (assessed by frequency \times quantity of use) in their 20s as a function of relationship length, taking into account the men's antisocial behavior and the autoregressive effects (AR) of alcohol use (i.e., the influence of alcohol use at one point in time on the next point). We hypothesized that, consistent with prior research (e.g., Chan, Neighbors, Gilson, Larimer, & Marlatt, 2007), men would show decreases in alcohol use across their 20s. Additionally, autoregressive effects were expected to be significant but to decrease over time, given the expected effects of proximal context (i.e., intimate partner's alcohol use) on alcohol use in early adulthood.

Second, we examined the influence of partners' alcohol use on the course of men's alcohol use in their 20s. Given the previous findings on partner influence on health-risking behaviors in general (e.g., Capaldi, Kim, & Pears, 2009; Giordano, Cernkovich, & Rudolph, 2002; Haynie, Giordano, Manning, & Longmore, 2005) and on alcohol use more specifically (Leonard & Homish, 2008; Leonard & Mudar, 2003, 2004), the women's concurrent level of alcohol use was expected to be positively associated with men's alcohol use at each time point. In addition, we examined whether partner influences on men's alcohol use varied across the developmental ages studied, although no directional hypothesis was made because of the limited research on this issue. Third, we examined the influence of changing partners and of the new partner's level of alcohol use on men's use. It was expected that men's alcohol use would be influenced by new partners' usage level, rather than by repartnering per se.

Methods

Participants

The men were recruited at ages 9–10 years for the OYS from public schools in a midsized Pacific Northwest city that had higher-than-average incidences of delinquency in the neighborhoods (*N*=206, participation rate = 74%) and were annually assessed over the past 30 years. The men were mostly European American (90%) and from families with low socioeconomic status (75%; Hollingshead, 1975). The Couples Study was initiated at men's ages 17–19 years. Because of limited data on the women's alcohol use at the initial couples' assessment, the present study focused on couples' assessments at ages 20–23, 23–25, 25–27, and 27–29 years, designated as Time 1 (T1), Time 2 (T2), Time 3 (T3), and Time 4 (T4). Men's alcohol use, assessed in OYS approximately 1 year prior to the Couples Study T1 (average age of 19.8 years), was entered into all models as a baseline variable (hereafter referred to as baseline alcohol use for men) to provide the initial value for the AR process (Bollen & Curran, 2004; Curran & Bollen, 2001).

The present analysis included 110 men who had participated with a partner across all four assessments. Percentages of couples by relationship status (married, cohabiting, and dating) and partner status (new vs. same partner) by assessment are presented in Table 1, along with other demographic characteristics of the sample. By T4, 68% of the men had a history of arrest including all juvenile and adult arrests (an average of 7.8 arrests with a range of 1 to 38 for those with any arrest), indicating at-risk nature of the sample. Those men excluded from the present analyses did not systematically differ on their alcohol use and other delinquency variables from those men included in the study.¹ Measures represent self-reported data from in-person interviews and questionnaires (see Capaldi & Crosby [1997] and Capaldi, Shortt, & Crosby [2003]) for further information on the Couples Study).

Measurements

Alcohol use—Men and women were asked how many times in the last year they had consumed alcohol and the average number of drinks consumed on a typical occasion. The product (i.e., the frequency times the quantity) was then calculated at each time point to represent each partner's alcohol use. Prevalence rates of alcohol use during the past year ranged from 84% to 93% for men and 85% to 86% for women over time. All of the couples had at least one partner who reported having used alcohol at least once over the study time period, except for two couples. Given that the purpose of the present study was to examine partners' potential influence on men's alcohol use over time, all couples were included in the analyses.

Antisocial behavior—Men's self-reported antisocial behavior in the past year (that did not pertain to substance use) was assessed using 34 items from the Self-Report Delinquency Scale (Elliott, Huizinga, & Ageton, 1985). The items included in the present study varied in terms of severity and forms, including theft (e.g., robbery), property damage (e.g., damaged or destroyed family member's/employer's property), and violence (e.g., threatened/hit parent/coworker). For the present study, the count of different types of delinquent acts was computed at each time point (alphas = 0.71–0.82 over time).

Partner's status—To examine the influences of repartnering on men's alcohol use, a time-varying dummy variable was created to indicate the partner's status (coded as "1" for a new partner and "0" for a partner from an intact relationship relative to the prior time point).

¹The only exception was that those men who were included in the analysis reported lower levels of alcohol use at T4 (t[157] = 2.11, p = 0.04).

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Table 2 shows the number of couples with different forms of relationship and partner status over time.

Relationship length—Given our interest in developmental aspects of partner influence on men's alcohol use over time as a function of relationship processes, couples' relationship length, rather than men's age, was used as the time scale in the longitudinal growth models.

Design and Analysis

Men's and women's alcohol use values were log transformed to reduce skew. To reduce multicollinearity between the predictors and ease the interpretation of the regression coefficients (Cohen, Cohen, West, & Aiken, 2003), women's alcohol use scores were grand mean centered (i.e., averaged across all persons and time points). Men's antisocial behavior was controlled for in all conditional models. We first examined change in men's alcohol use across their 20s as a function of relationship length using a linear latent growth model that allowed for random intercept and slope parameters (which were allowed to covary). This model also included men's lag-one AR effects of alcohol use between time points, thus accounting for time-lagged influences of men's alcohol use above and beyond changes due to the overall developmental processes in alcohol use (Model 1; Bollen & Curran, 2004; Curran & Bollen, 2001).

Next, women's alcohol use was added as a time-varying predictor to Model 1 to assess concurrent time-specific effects of women's alcohol use on men's alcohol use, regardless of the partner status (i.e., new vs. intact from prior time point). This allowed for differentiation of proximal concurrent effects of partners' alcohol use on men's alcohol use from men's own developmental processes of alcohol use over time (i.e., growth or decline) and their AR effects. The stability of partners' influences over early adulthood for all couples (Model 2) was tested by constraining the effect of partners' alcohol use on men's use as equal across assessments, and then examining the overall change in model fit via the Satorra-Bentler Chi-Square Difference Test² (denoted *TRd*, Satorra & Bentler, 2011). Finally, two time-varying predictors were added to the model: new partner's status (code "0" for same and "1" for new partner) tested whether, on average, men in newly formed relationships drank more or less than men in intact relationships, and the interaction of partner's alcohol use by partner status tested whether the impact of the partners' alcohol use on men's alcohol use significantly differed for new versus intact relationships (Model 3).

Results

Men's and women's average levels and prevalence rates of alcohol use for the entire sample, including abstainers, are presented in Table 3. When only those men who used alcohol were considered, the average number of drinks per month reported was 6.06 (SD = 11.28) at baseline, 53.57 (SD = 120.06) at T1, 30.35 (SD = 37.16) at T2, 41.49 (SD = 74.27) at T3, and 30.84 (SD = 53.60) at T4. Similarly, for only the women who used alcohol, the average number of drinks per month were 8.73 (SD = 32.68) at T1, 11.62 (SD = 34.11) at T2, 8.29 (SD = 17.01) at T3, and 7.56 (SD = 14.78) at T4. Correlations between the men's and women's concurrent levels of alcohol use ranged from 0.49 to 0.60 (Table 4).

Growth in Men's Alcohol Use in Early Adulthood

Information criteria and parameter estimates for all three primary growth models and the unconditional model are presented in Table $5.^3$ The intercept was coded to denote the

 $^{^{2}}$ The Satorra-Bentler scaled chi-square difference test (TRd) was used to correct for potential distributional problems associated with small samples and nonnormality (Satorra & Bentler, 2011).

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average relationship length at T1 of 1.86 years. The unconditional model (first column) indicated a negative slope over time in alcohol use across early adulthood. The random intercept variance was significant but not the random slope variance, suggesting significant individual variations in the level of men's alcohol use at T1 but not in linear change. However, once men's lag-one AR effects of alcohol use (i.e., the effect of alcohol use at the prior time point) and their antisocial behavior were added to the unconditional model (Model 1), the mean of the slope factor as well as the variance of the intercept factor were no longer significant. Similar to the unconditional model, the variance of the random slope factor and covariance between the intercept and slope factors were nonsignificant. Model 1 vielded a significant increase in overall model fit over the unconditional model (TRd[4] =20.88, p < 0.001), suggesting that the lag-one AR effects of men's alcohol use (controlling for their antisocial behavior) captured the nature of men's alcohol use across early adulthood better than the unconditional trajectory of alcohol use.⁴ All AR effects were significant except from T3 to T4, indicating that, on average, men's alcohol use in their early 20s is predictive of their alcohol use in their mid 20s, but the same is not true from the mid to the late 20s.⁵ In addition, men's antisocial behavior was positively related to their alcohol use and was not found to vary significantly over time (TRd[3] = 5.74, p = 0.13; results are available from the authors upon request). Thus, the effect of men's antisocial behavior was constrained to be time invariant in subsequent models.

The Influence of Partners' Alcohol Use

When added to the model as a time-varying predictor, women's alcohol use had significant and positive time-specific effects on men's alcohol use across their 20s (all *p* values < 0.001; full model results are available from authors upon request). Next, time-specific effects of partners' alcohol use were held constant over time to test whether partner effects changed over time (Model 2). The partners' effects on men's use across their 20s remained significant, but no significant improvement in model fit was found (TRd[3] = 4.50, p =0.21), indicating that the main effects of partners' alcohol use may be constant across men's early adulthood when considering all couples. The lag-one AR effects of the men's own alcohol use remained significant except from T3 to T4, but men's antisocial behavior was no longer significant.

The Influence of a New Partner

To examine the influence of new partners, the partner's status (coded "0" for same and "1" for new) was included in Model 3, along with the interaction between the partner's alcohol use and the partner's status. Note that by adding these two predictors to the model, the coefficient for the main effect of partners' alcohol use now represents the effect for intact couples only, which was not found to significantly vary over time when considering only intact couples (TRd[3] = 2.59, p = 0.46) and was therefore constrained to be equal across assessments. The coefficient for partner's status represents the average difference in men's alcohol use in newly formed versus intact relationships. The interaction term indicates whether partners' influence varied depending on the partner's status, which was free to vary

³Given that we are modeling men's alcohol use as a function of relationship length, which will vary across couples, model fit indices (e.g., RMSEA, TLI, and CFI) are not available for the latent growth models because one overall variance/covariance matrix does not exist for model comparisons (http://www.statmodel.com/discussion/messages/12/27.html?1314407784).

⁴An alternate form of Model 2 was fit without controlling for men's antisocial behavior to ensure that the significant increase in overall model fit of Model 2 compared to the unconditional model was attributable to men's time specific lag-one autoregressive effects of alcohol use and not their antisocial behavior (TRd[3] = 13.51, p = 0.01).

⁵To test formally whether time-lagged influences for men's alcohol use varied over time, an alternative latent growth model was fit in which all four of the AR parameters were constrained to be equal, and the overall model fit was compared to Model 1. This resulted in a significantly worse model fit then allowing these influences to be freely estimated (TRd[3] = 10.82, p = 0.01).

over time given the influence of a new partner's alcohol use on the man's use significantly varied across time (TRd[3] = 10.08, p = 0.02).

The partner status (i.e., a new partner) was significantly and negatively related to men's use at T4 only, suggesting that, in general, those men who repartnered at approximately age 28 years drank significantly less at that time than those men who remained in intact relationships. However, the interaction term was also significant at T4, indicating that if men repartnered in their late 20s, the influence of the new partner's alcohol use on the man's use was significantly greater than in intact relationships. Hence, the extent to which a man who repartnered in his late 20s was predicted to drink less than a man who remained in an intact relationship was highly influenced by his new partner's alcohol use. As shown in Figure 1, a man's predicted alcohol use at age 28 years substantially decreased if the new partner drank less than average but remained high if the new partner drank more than average. This suggests that repartnering with a woman with low levels of drinking is a stronger protective factor for men in their late 20s.

Discussion

The overarching goal of the present study was to further our understanding of how partner influence processes work for community men from at-risk backgrounds and their partners by investigating whether intimate partners would exert a significant influence on men's alcohol trajectories, as suggested in the literature (e.g., Leonard & Eiden, 1999; Leonard & Homish, 2008; Leonard & Mudar, 2003). Consistent with prior studies, men decreased their alcohol use across their 20s (e.g., Cohen, Chen, Crawford, Brook, & Gordon, 2007). However, women's alcohol use had significant proximal effects on men's alcohol use across time; higher levels of women's use predicted higher levels of men's use. Moreover, there was no evidence that such partner effects changed across men's lives from their early to late 20s, regardless of relationship types (i.e., married, cohabiting, or dating). Post hoc analyses also indicated no significant differences in the main effects of partner influence across different relationship types (i.e., married/cohabiting vs. dating) over time, suggesting that women's drinking behaviors may be equally influential on their partner's alcohol use in their 20s across all types of romantic relationships.

It is noteworthy that the effect of men's alcohol use in the prior time period on their current use (i.e., lag-one AR effects) decreased over time and became nonsignificant as men reached their late 20s. This finding, combined with the significant time-specific effects of partners' alcohol use, suggests that men's alcohol use during early adulthood is more likely to be influenced by time-specific proximal contexts than by other developmental processes (e.g., maturation). Thus, intervention efforts focused on men's proximal contexts (i.e., intimate partners) may be effective in reducing problem drinking behaviors in early adulthood.

In addition, findings indicated that the difference in partner influence in new versus intact relationships was significantly greater only when the men were in their late 20s and that their new partner's alcohol use determined the extent to which the men were likely to drink less. The new partner's lower use may be especially salient for men in their late 20s because at this age men typically show significantly decreasing levels of alcohol use. For those men who continue to drink more in their late 20s, the new partner's lower use may redirect them toward more normative alcohol trajectories of reduced use. Given that at-risk men tend to experience multiple relationships, the examination of specific effects of new versus longer-term partners can help to further refine our understanding of partners' influence on men's alcohol use.

It is also important to note some of the limitations of the study. First, this study was derived from a longitudinal study of at-risk men whose romantic relationships have been followed over an extended period of time regardless of their relationship status; some of the men experienced multiple relationships with different partners over time. Although this is a unique aspect of the study, we were unable to examine men's influence on their partners' alcohol use over time. Similarly, it was not feasible to estimate lagged effects of partner influence properly; thus, our estimation of partners' influence is limited to concurrent effects, rather than lagged effects. Therefore, it is difficult to rule out the possibility that some of the observed associations may be because of selection processes – another key mechanism that may underlie similarities in partners (e.g., Bullers, Cooper, & Russell, 2001; Curran, Stice, & Chassin, 1997). Third, the rather small sample size of the present study may limit generalizability of the findings. Furthermore, the present analysis did not include potential factors that might explain variations in partner influence on men's alcohol use behaviors – such as relationship satisfaction and being a parent.⁶ Follow-up studies on dynamic associations between relationship satisfaction, parenthood, and alcohol use trajectories within intact couples are warranted. Finally, the present study did not examine how partner influences occur within the dyad. Future research using direct observation approaches focusing on interactions pertaining to alcohol use might further our understanding of how such influence processes unfold.

Despite these potential limitations, this study applied a comprehensive analytic approach to long-term longitudinal data and provides interesting insights on romantic partner influence processes on at-risk men's alcohol use from the early to late 20's, using independent reports of the men's and women's alcohol use. By focusing on at-risk men who may be at an increased risk for continued problem drinking, regardless of relationship types, and by examining development aspects of partner influence across varying partner status over time, our findings significantly expand the understanding of partner influence processes among at-risk couples. Given that drinking behaviors in couples are significantly related to relationship adjustment (Mudar, Leonard, & Soltysinski, 2001; Quigley & Leonard, 2000), partner violence (e.g., Foran, Heyman, Slep, Snarr, & United States Air Force Family Advocacy Research Program, 2012; Foran & O'Leary, 2008), and poor parenting behaviors (e.g., Keller, Cummings, Davies, & Mitchell, 2008), findings from this study have clinical implications both for interventions aimed at reducing men's alcohol use and for interventions to promote healthy relationships within couples.

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⁶Our preliminary analyses indicated that men's relationship satisfaction at the prior time point was negatively associated with the current partner status (new vs. same), as the men with lower levels of relationship satisfaction were more likely to have a new partner in the subsequent time point. Men's concurrent levels of relationship satisfaction, however, were not significantly associated with their drinking behavior across all time points. Similarly, the presence of children in the household was not significantly related to men's drinking behavior across the four time points, except for at men's approximate age 24 years (T2) with more children in the home associated with less men's alcohol use.

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Figure 1.

Average predicted alcohol use for men in new and intact relationships with partners that are high verses low in alcohol use.

Note. *Values denote log-transformed alcohol use. The predicted alcohol use scores were estimated assuming that a man who repartnered had an average relationship length of 2 years at each assessment wave. For intact couples, however, relationship length was set to the average relationship length at each assessment: 1.86, 3.31, 4.11 and 5.07 years, respectively.

Table 1

Sample Characteristics (Averages, Standard Deviations, and Percentages)

| | | Asses | sment | |
|--|--------------|--------------|--------------|--------------|
| | T1 | T2 | Т3 | T4 |
| Men's age (years) | 21.27 (.87) | 24.00 (.58) | 26.04 (.61) | 28.04 (.63) |
| Women's age (years) | 20.76 (2.94) | 23.06 (3.22) | 25.00 (3.68) | 26.61 (3.58) |
| Relationship length (years) | 1.86 (1.63) | 3.31 (2.41) | 4.10 (2.86) | 5.07 (3.23) |
| Men's education (years) | 11.35 (1.38) | 11.60 (1.68) | 11.82 (1.83) | 11.90 (1.84) |
| Women's education (years) | 11.75 (1.59) | 12.51 (2.33) | 12.37 (2.20) | 12.54 (2.30) |
| Combined annual income (per \$10,000) | 1.86(1.28) | 3.19 (2.54) | 3.98 (2.38) | 4.18 (2.34) |
| Received at least one form of financial aid | 66% | 51% | 42% | 45% |
| Men's antisocial behavior (average # of criminal acts) | 1.15 (1.78) | 0.73 (1.55) | 0.67 (1.41) | 0.55 (1.56) |
| Endorsed at least one antisocial behavior | 46% | 29% | 32% | 21% |
| Relationship status: | | | | |
| Married | 21% | 39% | 51% | 51% |
| Cohabitating | 39% | 36% | 35% | 32% |
| Dating | 40% | 25% | 14% | 17% |
| Partner Status*: | | | | |
| New Partner | 35% | 39% | 25% | 23% |
| Same Partner | 65% | 61% | 75% | 77% |

Note:

*43% of the men participated with the same partner at all assessments, and 10% of the men participated with a different partner at all assessments.

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Table 2

Relationship Status and Partner Status Frequencies by Time Point

| | | Asses | sment | |
|--|----|-------|-------|----|
| | T1 | T2 | Т3 | T4 |
| Partner Status by Relationship Status (<i>n</i>) | | | | |
| Intact married | 16 | 35 | 56 | 56 |
| Intact cohabitating | 25 | 22 | 21 | 25 |
| Intact dating | 31 | 10 | 5 | 4 |
| New married | 7 | 8 | 0 | 0 |
| New cohabitating | 18 | 17 | 17 | 10 |
| New dating | 13 | 18 | 11 | 15 |

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Table 3

Men's and Women's Alcohol Use

| Baseline | T1 | T2 | Т3 | T4 | T1 | T2 | Т3 | T4 |
|--|----------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
| Average Alcohol use (<i>SD</i>) 5.11 (10.59) 4 | 19.67 (116.41) | 28.14 (36.63) | 37.72 (71.79) | 26.64 (50.89) | 7.38 (30.19) | 9.93 (31.77) | 7.16 (16.05) | 6.53 (13.97) |
| Abstainers 15% | 7% | 7% | 6% | 14% | 15% | 15% | 14% | 14% |
| Less than 1 drink/week 58% | 31% | 24% | 32% | 34% | 61% | 59% | 63% | 64% |
| More than 1 drink/week but less than 1 drink/day 24% | 33% | 35% | 28% | 30% | 18% | 18% | 14% | 15% |
| More than 1 drink/day 3% | 29% | 34% | 31% | 22% | 5% | 8% | %6 | 7% |

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Table 4

Correlation Matrix of Men's and Women's Alcohol Use (Frequency Times Quantity) across Early Adulthood⁺

| Men T1 0.58 *** T3 T3 T4 T1 T2 $128 ***$ T3 $128 ***$ T4 T2 $128 ***$ T3 $128 ***$ $128 ***$ T3 $128 ***$ | | | | | | M | en | | | Wom | u | |
|--|--|-----------------------|---------------|--------------|--------------|--------------|----------------|--------------|-------------|-----------|---------|------------|
| $ \begin{array}{llllllllllllllllllllllllllllllllllll$ | $ \begin{array}{l lllllllllllllllllllllllllllllllllll$ | | | baseline | T1 | T2 | T 3 | T4 | T1 | T2 | T3 | T 4 |
| T2 0.42^{***} 0.45^{***} 0.70^{***} T3 0.39^{***} 0.38^{***} 0.70^{***} T4 0.21^{*} 0.38^{***} 0.55^{***} 0.64^{***} Women T1 0.34^{***} 0.21^{*} 0.55^{***} 0.64^{***} 0.22^{**} 0.28^{**} T2 0.34^{***} 0.50^{***} 0.42^{***} 0.27^{**} 0.28^{**} T3 0.30^{**} 0.29^{**} 0.45^{***} 0.42^{***} 0.20^{*} 0.38^{***} 0.56^{***} 0.30^{**} 0.38^{***} 0.58^{***} <i>Note</i> . 174 0.29^{**} 0.20^{*} 0.38^{***} 0.45^{***} 0.60^{***} 0.30^{**} 0.38^{***} 0.58^{***} 14 0.29^{**} 0.20^{*} 0.38^{***} 0.45^{***} 0.60^{***} 0.30^{**} 0.38^{***} 0.58^{***} 14 0.29^{**} 0.20^{*} 0.38^{***} 0.45^{***} 0.60^{***} 0.30^{**} 0.38^{***} 0.58^{***} 0.50^{***} | T2 0.42^{***} 0.45^{***} 0.45^{***} 0.70^{***} T3 0.39^{***} 0.38^{***} 0.70^{***} 0.64^{***} T4 0.21^{*} 0.21^{*} 0.55^{***} 0.64^{***} Women T1 0.34^{***} 0.64^{***} 0.64^{***} T3 0.34^{***} 0.50^{***} 0.64^{***} 0.12^{**} Women T1 0.34^{***} 0.64^{***} 0.20^{**} 0.43^{***} T3 0.34^{***} 0.30^{***} 0.42^{***} 0.20^{*} 0.43^{***} T4 0.29^{**} 0.23^{***} 0.45^{***} 0.60^{***} 0.38^{***} 0.50^{***} Note. T4 0.29^{**} 0.23^{***} 0.45^{***} 0.60^{***} 0.38^{***} 0.5^{**} Note. T4 0.29^{**} 0.20^{**} 0.38^{***} 0.60^{***} 0.5^{**} 0.5^{**} Values were log-transformed prior to calculation of correlation coefficients. 1.8^{**} 1.8^{*} 1.8^{*} 1.8^{*} 1.8^{*} Volob 1.8^{*} $0.60^$ | Men | T1 | 0.58*** | | | | | | | | |
| T3 0.39 *** 0.38 *** 0.70 *** T4 0.21* 0.31 0.55 *** 0.64 *** Women T1 0.34 *** 0.50 *** 0.64 *** 0.28 * 0.34 *** 0.20 * 0.43 *** 0.30 ** 0.30 ** 0.38 *** 0.50 ** 0.30 ** 0.38 *** 0.50 ** 0.30 ** 0.38 *** 0.50 ** 0.30 ** 0.58 *** 0.50 ** 0.50 ** 0.58 *** 0.58 *** 0.50 *** 0.50 ** 0.58 *** 0.58 *** 0.50 *** 0.50 ** 0.58 *** 0.58 *** 0.50 *** 0.50 ** 0.58 *** 0.58 *** 0.50 *** 0.50 *** 0.50 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.50 ** 0.58 *** 0.58 *** 0.58 *** 0.50 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.50 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.50 *** 0.58 *** 0.50 *** 0.50 *** 0.58 *** 0.50 *** 0.58 *** 0.58 *** 0.50 *** 0.58 *** 0.50 *** 0.50 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.58 *** 0.50 *** 0.58 *** 0.50 *** 0.50 *** 0.58 *** 0.50 *** 0.58 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.58 *** 0.50 *** 0.58 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.58 *** 0.50 *** 0.58 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.50 *** 0.58 *** 0.50 **** 0.50 **** 0.50 **** 0.50 *** 0.50 | T3 0.39^{***} 0.70^{***} 0.70^{***} 0.64^{***} T4 0.21^{*} 0.21^{*} 0.55^{***} 0.64^{***} 0.64^{***} Women T1 0.34^{***} 0.21^{*} 0.55^{***} 0.64^{***} 0.28^{**} T2 0.34^{***} 0.30^{***} 0.12 T2 0.25^{*} 0.31^{*} 0.53^{***} 0.42^{***} 0.27^{**} 0.28^{**} 0.33^{***} 0.58^{***} 0.56^{***} 0.30^{**} 0.38^{***} 0.5 | | T2 | 0.42^{***} | 0.45*** | | | | | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | T3 | 0.39^{***} | 0.38*** | 0.70^{***} | | | | | | |
| Women T1 0.34^{***} 0.50^{***} $0.18M$ 0.08 0.12 T2 0.25^{*} 0.31^{*} 0.53^{***} 0.42^{***} 0.27^{**} 0.28^{**} T3 0.30^{**} 0.29^{**} 0.45^{***} 0.49^{***} 0.20^{*} 0.33^{***} 0.56^{***} 0.30^{**} 0.38^{***} 0.58^{***} Note. \uparrow Values were log-transformed prior to calculation of correlation coefficients. p < 0.001. $*^{**}$ $p < 0.01.$ p < 0.01. | Women T1 0.34^{***} 0.50^{***} $0.18M$ 0.08 0.12 T2 0.25^{*} 0.31^{*} 0.53^{***} 0.42^{***} 0.28^{**} T3 0.30^{**} 0.31^{*} 0.53^{***} 0.42^{***} 0.20^{*} 0.43^{***} T3 0.30^{**} 0.29^{**} 0.45^{***} 0.42^{***} 0.20^{*} 0.43^{***} T4 0.29^{**} 0.20^{*} 0.38^{***} 0.45^{***} 0.30^{**} 0.3^{***} Note. T 0.29^{**} 0.20^{*} 0.38^{***} 0.30^{**} 0.3^{***} Values were log-transformed prior to calculation of correlation coefficients. 0.60^{***} 0.30^{**} 0.3^{**} $p < 0.001.$ $p < 0.01.$ $p < 0.01.$ $p < 0.05.$ $p < 0.05.$ $p < 0.05.$ | | $\mathbf{T4}$ | 0.21^* | 0.21^* | 0.55*** | 0.64*** | | | | | |
| T2 0.25^{*} 0.31^{*} 0.53^{***} 0.42^{****} 0.27^{**} 0.28^{**} T3 0.30^{**} 0.30^{**} 0.49^{****} 0.20^{*} 0.43^{****} T4 0.29^{**} 0.20^{*} 0.38^{****} 0.49^{****} 0.30^{***} 0.33^{****} 0.58^{****} 0.58^{****} 0.50^{****} 0.38^{****} 0.58^{****} 0.58^{****} 0.50^{****} 0.50^{****} 0.58^{****} 0.58^{****} 0.50^{****} 0.50^{****} 0.50^{****} 0.50^{****} 0.50^{****} 0.50^{****} 0.50^{****} 0.58^{****} 0.58^{****} 0.50^{*} | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | Women | T1 | 0.34^{***} | 0.50^{***} | 0.18^M | 0.08 | 0.12 | | | | |
| T3 0.30^{**} 0.29^{***} 0.45^{****} 0.49^{****} 0.30^{***} 0.43^{****} T4 0.29^{***} 0.20^{*} 0.38^{****} 0.45^{****} 0.30^{***} 0.38^{****} 0.58^{****} 0.58^{****} 0.58^{****} 0.50^{****} 0.58^{****} 0.58^{****} 0.50^{****} 0.58^{****} 0.50^{****} 0.58^{****} 10^{*} | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | T2 | 0.25^{*} | 0.31^* | 0.53*** | 0.42*** | 0.27^{**} | 0.28^{**} | | | |
| T4 0.29** 0.20* 0.38*** 0.45*** 0.60*** 0.30** 0.38*** 0.58 <i>Note.</i> Values were log-transformed prior to calculation of correlation coefficients. *** p < 0.001. *** p < 0.001. *** p < 0.001. | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | T3 | 0.30^{**} | 0.29^{**} | 0.45*** | 0.49*** | 0.30^{**} | 0.20^* | 0.43*** | | |
| <i>Note.</i> ⁺ Values were log-transformed prior to calculation of correlation coefficients. ^{***} p < 0.001. ^{***} p < 0.01. ^{***} p < 0.05. ^{***} | <i>Note.</i> ⁺ Values were log-transformed prior to calculation of correlation coefficients. ^{***} p < 0.001. ^{***} p < 0.01. ^{***} p < 0.05. ^W p < 0.10. | | $\mathbf{T4}$ | 0.29^{**} | 0.20^* | 0.38*** | 0.45*** | 0.60^{***} | 0.30^{**} | 0.38*** | 0.58*** | |
| ⁺ Values were log-transformed prior to calculation of correlation coefficients. ^{***} p < 0.001. ^{**} p < 0.01. ^{**} p < 0.05. ^{**} | ⁺ Values were log-transformed prior to calculation of correlation coefficients. ^{***} p < 0.001. ^{**} p < 0.01. ^{**} p < 0.05. ^{**} p < 0.05. | Vote. | | | | | | | | | | |
| $\begin{array}{c} *** \\ p < 0.001. \\ ** \\ p < 0.01. \\ p < 0.05. \end{array}$ | $ \begin{array}{c} *** \\ p < 0.001. \\ ** \\ p < 0.01. \\ * \\ p < 0.05. \end{array} $ | + Values v | vere lo | g-transforme | d prior to c | alculation o | of correlation | n coefficien | its. | | | |
| p < 0.01. p < 0.05. $M_{p < 0.10.}$ | $ \begin{array}{l} & ** \\ & p < 0.01. \\ & p < 0.05. \\ & W \\ & p < 0.10. \end{array} $ | *** <i>p</i> < 0.(| 01. | | I | | | | | | | |
| p < 0.05. $M_{p} < 0.10$. | p < 0.05. M p < 0.10. | $^{**}_{p < 0.01}$ | _: | | | | | | | | | |
| $M_{\rm e} < 0.10$. | $M_{p} < 0.10.$ | $_{p < 0.05.}^{*}$ | | | | | | | | | | |
| | | $M_{p < 0.10}$ | <i>.</i> . | | | | | | | | | |

Table 5

Latent Growth Models of Men's Alcohol Use Across Their 20s

| | Unconditional Model | Model 1 | Model 2 | Model 3 |
|----------------------------------|---------------------|---------|-------------------|------------|
| Information Criteria | | | | |
| AIC | 2251.27 | 2228.97 | 2161.84 | 2159.82 |
| BIC | 2289.08 | 2277.58 | 2213.15 | 2232.73 |
| Adj. BIC | 2244.84 | 2220.70 | 2153.10 | 2147.41 |
| Fixed Effects | | | | |
| Intercept | 4.53*** | 3.06*** | 3.15*** | 3.01*** |
| Slope | -0.08^{*} | -0.03 | 0.02 | 0.01 |
| AR effect baseline to T1 | 0.06 | 0.47* | 0.48** | 0.51** |
| AR effect T1 to T2 | | 0.29* | 0.27** | 0.29*** |
| AR effect T2 to T3 | | 0.30* | 0.27^{*} | 0.30*** |
| AR effect T3 to T4 | | 0.22 | 0.18 ^M | 0.26** |
| Men's ASB T1 to T4 | | 0.19** | 0.11 | 0.11^{M} |
| Partners' alcohol T1 | | | 0.42*** | |
| Partners' alcohol T2 | | | 0.42*** | |
| Partners' alcohol T3 | | | 0.42*** | |
| Partners' alcohol T4 | | | 0.42*** | |
| Same partners' alcohol T1 | | | | 0.40*** |
| Same partners' alcohol T2 | | | | 0.40*** |
| Same partners' alcohol T3 | | | | 0.40*** |
| Same partners' alcohol T4 | | | | 0.40*** |
| New partner T1 | | | | 0.20 |
| New partner T2 | | | | 0.07 |
| New partner T3 | | | | 0.37 |
| New partner T4 | | | | -1.30* |
| $PA \times New$ partner T1 | | | | -0.07 |
| $PA \times New$ partner T2 | | | | 0.03 |
| $PA \times New$ partner T3 | | | | -0.15 |
| $PA \times New$ partner T4 | | | | 0.45* |
| Covariance (MA at BL, intercept) | 1.68*** | 0.72 | 0.23 | 0.14 |
| Covariance (MA at BL, slope) | -0.02 | 0.05 | 0.10 | 0.10 |
| Random Effects | | | | |
| Variance of intercept | 2.64*** | 1.03 | 0.74* | 0.70* |
| Variance of slope | 0.04 | 0.01 | 0.01 | 0.01 |
| Covariance (intercept, slope) | -0.02 | 0.01 | 0.00 | -0.01 |

Note. ASB = Antisocial Behavior; AR = Autoregressive; BL = Baseline; MA = Men's Alcohol; PA = Partners' Alcohol.

 $^{***}_{p < 0.001.}$

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* p < 0.05.

 $^{M}p < 0.10.$