Young Adult Drinking Partnerships: Alcohol-Related Consequences and Relationship Problems Six Years Later

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ABSTRACT. Objective: This study examines the association between young adult drinking partnerships (ages 18–26 years) and later alcohol-related problems and consequences, alcohol use, relationship quality, and relationship dissolution in adult relationships (ages 26–35). **Method:** Data came from the National Longitudinal Study of Adolescent Health (Add Health; Waves III and IV) with 1,347 young adults and their partners at Wave III, including dating, cohabiting, and married couples, and individual adult behaviors at Wave IV, 6 years later. Drinking partnerships were based on alcohol use frequency, quantity, heavy episodic drinking, and getting drunk. **Results:** Four clusters included (a) congruent light and infrequent, (b) discrepant male heavy and frequent, (c) discrepant female heavy and frequent, and (d) congruent heavy and frequent drinkers. Young adult discrepant partnerships reported more alcohol-related problems and consequences 6 years later. Young adults

in the congruent heavy drinking partnership indicated more separation/divorce and alcohol use as adults. Young adult married men who drank discrepantly and higher compared to their wives reported higher rates of adult drinking and problems than other men. There were a number of negative effects from congruent heavy drinking, especially for women. **Conclusions:** These findings demonstrated that there are multiple types of young adult drinking partnerships based on couples' alcohol use behaviors. Men may be at risk for serious alcohol-related problems later in adulthood, especially when paired with discrepant drinking partners and congruent heavy drinking partners. Women are at risk when in congruent, heavy and frequent drinking partnerships. Studying romantic relationships and drinking has implications for broad aspects of young adult and adult development. (*J. Stud. Alcohol Drugs*, 75, 704–712, 2014)

THIS STUDY EXAMINES the association among young adult drinking partnerships and adult alcohol-related consequences and relationship problems 6 years later. Young adulthood is an important developmental period that not only involves the formation and maintenance of new romantic relationships but also is a time when many engage in risky behaviors, such as high amounts of alcohol use. The experiences that arise during this period have the potential to influence later adult life decisions and behaviors, such as future alcohol use and misuse, as well as relationship quality.

Congruent (i.e., couple similar) and discrepant (i.e., couple dissimilar) dyadic drinking partnerships using cluster analysis were first described by Roberts and Leonard (1998) in adult married couples. Drinking partnerships were based on couple patterns of typical quantity and frequency of alcohol intake, context in which drinking occurs, and similarities or differences between partners' drinking levels. Dating, cohabiting, and married young adult couples (ages 18–26) have displayed congruent and discrepant drinking

partnerships as well (Wiersma and colleagues, 2009, 2010). With minor differences, these studies identified four to five groups of drinking partnerships.

Compatibility theory provides a useful framework for understanding how couples match on key characteristics. According to compatibility theory, similarity (i.e., the tendency for two individuals to be alike at one moment in time; Gonzaga et al., 2007) increases the likelihood that couples will establish a mutually satisfying partnership. Compatibility theory has been supported in the areas of personality traits and mutual interests (Acitelli et al., 2001; Houts et al., 1996) on such qualities as satisfaction, commitment, intimacy, and relationship longevity. Compatibility between romantic partners predicts positive relationship quality. By contrast, dissimilar couples experience more conflict, negativity, and ambivalence about the relationship (Houts et al., 1996). Crawford et al. (2002) suggested that similarity between couples results in a greater likelihood that couples will engage in activities and spend more time together, which leads to greater satisfaction. Generalizing from compatibility theory, if frequent drinking is a principal and enjoyable part of social interaction, then couples will make positive evaluations of these relationships. Couple drinking compatibility, compared with discrepancy, should increase the likelihood of continuing the relationship and reduce problematic outcomes such as alcohol-related problems and relationship dissatisfaction.

There is support for compatibility theory with respect to couples' drinking. Research demonstrates that there are

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many consequences for couples who drink discrepantly (Fischer and Wiersma, 2012). For example, couples who drink discrepantly in their relationships, compared with those who drink congruently, reported lower relationship quality (Mudar et al., 2001; Roberts and Leonard, 1998; Wiersma et al., 2009). These studies examined drinking partnerships cross-sectionally. The few longitudinal studies reported that discrepant levels of alcohol use among married couples were associated with more relationship problems (Homish and Leonard, 2005, 2007) and relationship dissolution (Leonard et al., 2013; Ostermann et al., 2005). For example, incongruent drinking partnerships experienced steeper declines in marital satisfaction compared with couples in which both were heavy drinkers or neither were heavy drinkers. However, heavy congruent drinking did not impair relationship satisfaction (Homish and Leonard, 2005, 2007).

With most studies using cross-sectional methods on married couples, little is known about how dyadic drinking patterns affect young adults' lives longitudinally or within nonmarried relationships. Overall, dating and married couples exhibit different patterns of alcohol consumption because married couples tend to drink less (Bachman et al., 1996; Leonard and Mudar, 2003; Miller-Tutzauer et al., 1991; Temple et al., 1991). In addition, major life events, such as parenthood, may set married couples apart from dating or cohabiting couples. Drinking compatibility should be an important issue for unmarried romantic partners as well as married couples. Among dating couples, more congruent drinkers were characterized as having better relationship quality than discrepantly drinking partnerships (Fleming et al., 2010; Wiersma et al., 2009). These results may reflect a more general phenomenon whereby partner similarity both attracts couples and reinforces couple behaviors. As well, drinking within a highly committed relationship may be inherently different compared with a less committed relationship. Relationship type differences are important to examine both as main effects and as potential moderators. But as Fleming et al. (2010) acknowledged, little research has examined whether alcohol use plays a role in the relationship quality and dissolution of dating or cohabiting relationships.

Despite the appeal and empirical evidence for compatibility theory, there are also results that are seemingly at odds with compatibility theory in that, when couples consume large quantities of alcohol, they have a higher risk of experiencing relationship problems (Roberts and Leonard, 1998; Wiersma et al., 2009). Alcohol use has been cited as one of the major reasons for breaking up or divorcing (Amato and Previti, 2003; Halford and Osgarby, 1993; Leonard et al., 2013) among younger (Collins et al., 2007; Leonard et al., 2013) and older adults (Ostermann et al., 2005) and for interpersonal violence (Leadley et al., 2000; Wiersma et al., 2010). However, even in these studies there

is support for compatibility theory: Among older adults, discrepantly drinking couples had higher rates of divorce than congruently drinking adults (Ostermann et al., 2005; Torvik et al., 2013). In fact, the risk for divorce was higher among discrepant heavy drinking wives, more so than when the discrepant heavy drinkers were husbands (Leonard et al., 2013; Torvik et al., 2013). It may be that discrepancies in drinking form the basis for greater conflicts that contribute to decreased relationship satisfaction and commitment (Fischer and Wiersma, 2012; Kurdek, 1993). Drinking, especially discrepant drinking, may hinder the mutual development of intimacy and the skills needed for relationship growth (Baumrind and Moselle, 1985). In sum, compared with congruent drinking, discrepant partner drinking appears to constitute a potential risk for greater partner dissatisfaction and even relationship dissolution than congruent drinking across relationship types.

Most studies examining the effects of drinking on couple outcomes have found significant gender differences. A number of studies have shown that women's drinking was strongly associated with their perceptions of their male partners' drinking (Hammer and Vaglum, 1989; Wilsnack et al., 1984) as well as the actual drinking of husbands (Leonard and Eiden, 1999; Leonard and Mudar, 2003). However, there have been reports of the opposite effect—where wives' drinking influenced husbands' drinking (Cronkite and Moos, 1984; Wilsnack and Cheloha, 1987) and where men were more influenced by their female partners' drinking from adolescence to young adulthood (Wiersma et al., 2011). The current study also addresses gender differences and gender as a possible moderator of associations between couple drinking patterns and outcomes, but the literature does not provide evidence for clear gender expectations.

In this study, alcohol-related consequences of concern include excessive alcohol use as well as a range of difficulties that stem from excessive alcohol use. Heavy episodic drinking of individuals is connected to immediate and long-term consequences such as trouble with the police, injuries, academic difficulties, and driving under the influence of alcohol (Wechsler and Austin, 1998). However, in research on couples, alcohol-related problems were found only within discrepantly drinking couples (Wiersma et al., 2009), underscoring again the importance of considering the dyadic context of drinking. Although this study considers relationship dissolution as one of the outcomes of couple drinking patterns, there may be differences in associations between couple drinking patterns and other outcomes based on whether the participants' relationships are continuing or new. Therefore, relationship dissolution is also assessed for its role as a moderator. Because this is a new research direction, there are no expectations for relationship dissolution to affect or not affect the association between couple drinking patterns and outcomes.

Purpose and hypotheses

Although research has focused primarily on married couples, the current study extends prior research in a number of ways. It is theory based and longitudinal, uses a national sample, includes couple data within three types of relationships (dating, cohabiting, and married), uses controls for possible third variables, and tests the generalizability of the findings across relationship type, gender, and relationship dissolution. This study examines how young adult drinking partnerships (ages 18–26) are associated with later consequences in adulthood (ages 26–35) by focusing on one primary hypothesis rooted in compatibility theory: Those in heavy and discrepant drinking partnerships will experience more alcohol-related and relationship problems compared with those in congruent drinking partnerships. By contrast, if later consequences are based more on consumption of alcohol, then those in congruent heavy drinking partnerships would experience the most problems.

Method

Data are from the National Longitudinal Study of Adolescent Health (Add Health; Udry and Bearman, 1998; see Udry, 2003, for design information), which is a school-based, nationally representative and longitudinal study of health-related behaviors of adolescents and later outcomes that began in 1995. Our analyses use the Wave III (2001–2002) data set that includes 1,507 paired romantic partners, as well as Wave IV data (2007–2008) that only includes the primary Add Health participants' data (not couple data). The Wave III romantic pairs subsample included information from 1,507 partners of Add Health respondents, roughly equally divided among married, cohabiting, and dating partners. Romantic couples met three criteria: opposite-sex relationship, a current relationship, and partner is 18 years or older. Approval for this study was received from the primary author's university institutional review board.

The present study included individuals if they had data for both Waves III and IV, resulting in 1,347 couples. The 160 couples omitted because of missing data were more likely to be non-White participants with no other significant differences on study variables. Participants' relationship status at Wave III was dating ($n = 401$, 30%), cohabitating ($n = 483$, 36%), or married ($n = 463$, 34%). By Wave IV, most individuals were married (59%). Couples were between ages 18 and 26 at Wave III and between 26 and 35 years of age at Wave IV. Participants were predominantly White (60%).

Measures

Age, ethnicity (coded 0 = White, 1 = other), and highest level of education were included as control variables in the

models. As well, depression at Wave III was used as a control variable, similar to previous research that controlled for mental illness (Torvik et al., 2013). Participants responded to 12 items, such as "In the past 12 months, how often have you laughed a lot" (reverse scored) and "... how often have you cried a lot." Responses ranged from 0 (*never*) to 3 (*most or all of the time*; $M = 0.54$, $SD = 0.31$, range: 0–2.67; $\alpha = .83$). As well, Wave III control variables included relationship quality and alcohol negative consequences, variables that were also used as outcomes at Wave IV.

Relationship quality at Wave III was the average of three items that measured commitment and satisfaction on a scale of 1 (*very dissatisfied*) to 5 (*very satisfied*; $M = 4.66$, $SD = 0.65$; $\alpha = .86$). Wave IV relationship quality had seven averaged items, including "My partner (listens/listened) to me when I need someone to talk to" and "My partner (expresses/expressed) love and affection to me." Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*; $M = 4.10$, $SD = 0.81$; $\alpha = .89$). The two scales correlated ($r = .19$, $p < .001$).

Relationship dissolution at Wave IV was assessed by a number of factors: participants' current relationship status versus Wave III's status (i.e., dating, cohabiting, married), as well as the current relationship (in years). If respondents indicated that the relationship length was more than 6 years (overlap with Wave III) and the relationship status was the same or in a more committed status (i.e., dating in Wave III to cohabiting/married in Wave IV), then this situation was coded as the participant being with the same partner. If the length was less than 6 years, then the participant was coded as having a different partner, indicating dissolution of the Wave III relationship. Approximately 55% of participants were with the same partner from 6 years ago (coded 0; $n = 735$), and 45% were with a new/different partner (coded 1; $n = 612$).

Alcohol use at Wave IV used the same items as at Wave III for frequency and quantity of drinking in the past 12 months (see *Drinking partnerships*, below). Items were multiplied to form the average volume for participants' drinking at Wave IV ($M = 9.32$, $SD = 14.20$, range: 0–108 drinks per month).

Alcohol negative consequences at Wave III consisted of an average of eight items, such as, "You had problems at school or work because you had been drinking" and "You had problems with your friends because you had been drinking." Item responses ranged from 0 (*never*) to 4 (*5 or more times*; $M = 0.25$, $SD = 0.40$, range: 0–2.5, $\alpha = .80$). Wave IV alcohol negative consequences consisted of an average of four items that included "drinking interfered with work or school" and "problems with your family, friends, or people at work or school because of your drinking." Responses ranged from 0 (*never*) to 2 (*more than 1 time*; $M = 0.23$, $SD = 0.46$; $\alpha = .80$). The two scales correlated ($r = .42$, $p < .001$).

TABLE 1. Profile of couples' drinking partnerships at Wave III

Variable	Cluster means				<i>F</i>	η^2
	1 Congruent light & infrequent (<i>n</i> = 864)	2 Discrepant male heavy & frequent (<i>n</i> = 278)	3 Discrepant female heavy & frequent (<i>n</i> = 114)	4 Congruent heavy & frequent (<i>n</i> = 91)		
Female frequency	2.14 ^{abc1}	3.20 ^{ade2}	4.18 ^{bdf3}	5.21 ^{cef}	270.31***	.38
Male frequency	2.68 ^{ab1}	5.19 ^{ac2}	3.09 ^{cd3}	5.24 ^{bd}	238.61***	.35
Female quantity	1.53 ^{abc4}	3.05 ^{ade5}	9.42 ^{bdf6}	5.18 ^{cef}	366.06***	.45
Male quantity	2.09 ^{abc4}	7.77 ^{ad5}	2.93 ^{bde6}	6.86 ^{ce}	273.99***	.38
Female heavy episodic	1.21 ^{abc7}	1.78 ^{ade8}	3.28 ^{bdf9}	4.35 ^{cef10}	695.48***	.61
Male heavy episodic	1.57 ^{abc7}	4.72 ^{ade8}	2.03 ^{bdf9}	4.38 ^{cef10}	717.07***	.62
Female drunk	1.31 ^{abc11}	1.90 ^{ade12}	2.61 ^{bdf13}	4.47 ^{cef14}	612.95***	.58
Male drunk	1.50 ^{abc11}	3.97 ^{ad12}	1.82 ^{bde13}	4.02 ^{ce14}	542.80***	.55

Notes: *N* = 1,347. Means with matching superscript letters in a row differ significantly at $p < .001$ by Neuman–Keuls test. Matching superscript numbers in a column indicate a significant gender difference paired *t* test, $p < .05$. Frequency = number of days/12 months; quantity = number of drinks/12 months; heavy episodic = number of days consumed five or more drinks/12 months; drunk = number of days drunk/12 months. Congruent light and infrequent cluster includes abstainers. *** $p < .001$.

Serious alcohol problems was assessed with 10 items during Wave IV only (there is no equivalent measure prior to this wave). Items included, "Have you ever continued to drink after you realized drinking was causing you any emotional problems (such as feeling irritable, depressed, or uninterested in things or having strange ideas) or causing you any health problems (such as ulcers, numbness in your hands/feet, or memory problems)?" Responses were 0 = no and 1 = yes and were averaged ($M = .11$, $SD = .20$, $\alpha = .84$).

Drinking partnerships (Wave III) were derived from four items: frequency, quantity of alcohol consumption, heavy episodic drinking (four/five or more drinks for women/men), and getting drunk. Frequency of alcohol consumption was estimated by partners individually answering the following question: "During the past 12 months, on how many days did you drink alcohol?" Heavy episodic drinking was estimated by: "During the past 12 months, on how many days did you drink 4/5 drinks?" Getting drunk was assessed by: "During the past 12 months, on how many days did you get drunk?" Fixed responses for these three questions ranged from 1 (*1 or 2 days in the past 12 months*) to 6 (*every day or almost every day*). In addition, open-ended responses were given for quantity of alcohol consumed: "Think of all the times you have had a drink during the past 12 months. How many drinks did you usually have each time?"

Procedures similar to those of Wiersma et al. (2010) were used to develop Wave III couple drinking partnerships; however, there were two differences: (a) The previous study used couples who reported at least one drink in the previous 12 months, whereas the current study retained all couples, regardless of whether they drank (abstinent drinkers were included in the congruent, light and infrequent cluster, $n = 214$ of 864 couples); and (b) The current study included heavy episodic drinking and getting drunk as additional evidence of drinking within young adulthood, whereas Wiersma et al.

(2010) used only quantity and frequency. This study used a k-means iterative cluster analysis of the eight drinking variables for women and men: typical quantity of alcohol consumed, frequency, heavy episodic drinking, and getting drunk. To compare drinking partnerships across studies, the current drinking partnership analysis set the number of clusters to four. The resulting clusters were very similar to those of Wiersma et al. (2010): (a) congruent light and infrequent (congruent light = 64%), (b) discrepant male heavy and frequent (discrepant male = 21%), (c) discrepant female heavy and frequent (discrepant female = 8%), and (d) congruent heavy and frequent (congruent heavy = 7%) (Table 1).

Results

Wave III control variables (age, ethnicity, education, depression relationship quality, alcohol negative consequences) were significantly associated with outcomes (Wilks' $\lambda = .82$, $p < .001$); therefore, these variables were included in all analyses and reported scores were adjusted for covariates. All multiple mean comparisons were subject to Bonferroni adjustments. Because Wave IV did not include partners, 100% of the follow-up participants in the congruent clusters were either light or heavy drinkers. However, male heavy follow-up participants were 44% male heavy drinkers (and 56% female light drinkers) and female heavy follow-up participants were 59% female heavy drinkers (and 41% male light drinkers).

Drinking partnerships

The main study hypothesis predicted that those in Wave III heavy discrepant drinking partnerships (i.e., discrepant male, discrepant female) would experience more negative outcomes at Wave IV compared with those in congruent

TABLE 2. Wave IV outcomes as a function of Wave III covariates, cluster, and gender

Variable	Wave III clusters				<i>F</i>	η^2
	1 Congruent light & infrequent (<i>n</i> = 796)	2 Discrepant male heavy & frequent (<i>n</i> = 265)	3 Discrepant female heavy & frequent (<i>n</i> = 101)	4 Congruent heavy & frequent (<i>n</i> = 84)		
Wave III control variables						
Age	21.97 ^a	21.54 ^a	21.62	21.47	3.46*	.01
Ethnicity	0.45 ^{ab}	0.27 ^{ac}	0.44 ^d	0.26 ^{bd}	12.64***	.01
Education	12.89	13.20	12.69	13.32	3.48*	.02
Depression	0.53	0.57	0.56	0.53	0.97 N.S.	.002
Relationship quality	4.70	4.59	4.62	4.57	3.03*	.01
Alcohol negative consequences	0.10 ^{abc}	0.56 ^{ade}	0.27 ^{bdf}	0.71 ^{cef}	186.99***	.30
Wave IV variables, <i>M</i> (<i>SD</i>)						
Relationship quality						
Men	4.11 (0.05)	4.06 (0.09)	3.94 (0.12)	3.98 (0.12)	0.82 N.S.	.05
Women	4.09 (0.04)	4.14 (0.07)	4.05 (0.11)	4.06 (0.21)	0.25 N.S.	.05
Overall mean	4.10 (0.03)	4.11 (0.05)	4.00 (0.08)	4.00 (0.09)	0.94 N.S.	.05
Dissolution						
Men	0.45 (0.03)	0.52 (0.05)	0.56 (0.08)	0.56 (0.08)	1.25	.07
Women	0.42 (0.02)	0.45 (0.04)	0.42 (0.06)	0.61 (0.09)	1.28	.09
Overall mean	0.43 (0.02) ^a	0.48 (0.03)	0.48 (0.05)	0.59 (0.06) ^a	2.49*	.08
Alcohol use						
Men	11.39 (0.98) ^{a1}	16.85 (1.89) ^d	14.42 (2.64) ⁷	23.34 (2.58) ^{a8}	6.32***	.09
Women	5.19 (0.44) ^{a1}	6.76 (0.75) ^{b4}	6.78 (1.15) ^{c7}	13.74 (1.66) ^{abc8}	7.53***	.15
Overall mean	8.17 (0.50) ^a	10.54 (0.89) ^b	9.85 (1.33) ^c	17.94 (1.55) ^{abc}	11.16***	.13
Alcohol negative consequences						
Men	0.25 (0.03) ^{a2}	0.59 (0.04) ^{ab5}	0.32 (0.07) ^b	0.43 (0.07)	9.13***	.23
Women	0.14 (0.02) ^{a2}	0.13 (0.03) ^{b5}	0.13 (0.05) ^c	0.42 (0.16) ^{abc}	7.32***	.17
Overall mean	0.21 (0.02) ^{ab}	0.30 (0.03) ^a	0.21 (0.04) ^c	0.38 (0.05) ^{bc}	4.86***	.20
Serious alcohol problems						
Men	0.13 (0.01) ^{a3}	0.27 (0.02) ^{ab6}	0.15 (0.03) ^b	0.21 (0.03)	9.22***	.20
Women	0.08 (0.01) ^{a3}	0.09 (0.02) ^{b6}	0.08 (0.02)	0.17 (0.03) ^{ab}	2.68*	.15
Overall mean	0.10 (0.01) ^{ab}	0.15 (0.01) ^a	0.11 (0.02) ^c	0.18 (0.02) ^{bc}	5.71***	.18

Notes: All Wave IV variables are noted as means and standard deviations. Wave IV alcohol use is noted as the mean number of drinks in the past month. *N* = 1,245 (men's *n* = 545, women's *n* = 700 at Wave IV). Model controls for age (in years), ethnicity (% non-White), education (grade), depression (*M* = 0.54, *SD* = 0.31), relationship quality (*M* = 4.66, *SD* = 0.65), and negative consequences (*M* = 0.25, *SD* = 0.41) at Wave III. Means with matching superscript letters in a row differ significantly at *p* < .001 by Neuman-Keuls test. Matching superscript numbers in a column indicate significant gender differences, *p* < .05. N.S. = not significant.

p* < .05; **p* < .001.

partnerships (i.e., congruent light, congruent heavy). A multivariate analysis of covariance tested overall significant differences across all four clusters (Wilks' λ = .96, *p* < .001). Follow-up univariate *F* tests and multiple mean comparisons were tested (see overall means in Table 2). Although there were significant interaction effects, described below, the main effects provide results against which to compare the moderated findings.

There were significant effects of clusters on all Wave IV outcomes except relationship quality. There were a few cluster differences in support of the hypothesis that discrepancy would be associated with more negative outcomes than congruency in drinking partnerships: Discrepant male group members scored higher on alcohol negative consequences and serious alcohol problems than congruent light group members. However, overall the results pointed to more negative outcomes at Wave IV among those in the congruent heavy cluster: (a) compared with congruent light on relation-

ship dissolution, (b) compared with congruent light and discrepant female on alcohol negative consequences and serious alcohol problems, and (c) compared with all other groups on alcohol use. Most cluster differences failed to support the hypothesis that congruency would trump consumption.

Relationship type

It was predicted that relationship type would moderate the association between drinking partnerships and Wave IV outcomes. A multivariate analysis of covariance indicated a significant relationship type effect (Wilks' λ = .98, *p* < .01) as well as a significant interaction between relationship type and cluster (Wilks' λ = .97, *p* < .05). There was an unsurprising significant main effect for relationship type on dissolution, *F*(2, 1227) = 9.64, *p* < .001, with dating (*M* = 0.62, *SD* = 0.03) and cohabiting (*M* = 0.50, *SD* = 0.03) individuals significantly more likely to separate compared with married

individuals ($M = 0.34$, $SD = 0.05$). As for the two-way interaction, only Wave IV alcohol use was a significant outcome, $F(6, 1227) = 3.63$, $p < .001$, modified by a significant three-way interaction, with results described below.

Gender

With two gendered clusters (discrepant male, discrepant female), gender differences interacting with cluster were expected. A multivariate analysis of covariance indicated a significant main effect of gender (Wilks' $\lambda = .97$, $p < .001$) as well as an interaction of cluster by gender (Wilks' $\lambda = .96$, $p < .001$). Follow-up analyses revealed that men were significantly more likely to report Wave IV alcohol use, alcohol negative consequences, and serious alcohol problems than women. There was no significant interaction between relationship type and gender. As for the two-way interaction between cluster and gender, follow-up tests identified significant effects for Wave IV alcohol negative consequences, $F(3, 1215) = 14.11$, $p < .001$, and serious alcohol problems, $F(3, 1215) = 7.76$, $p < .001$, but the latter was modified by a significant three-way interaction as discussed below. With respect to alcohol negative consequences, among men, those in the congruent light group were lower than those in the male discrepant group, and the discrepant male group was higher than the discrepant female group. Among women, the members of the congruent heavy group scored higher than those in all other groups. Thus, there is little evidence that congruency afforded lower alcohol negative consequences than discrepancy.

There was an overall significant three-way interaction (Wilks' $\lambda = .95$, $p < .01$); follow-up univariate F tests, as noted, revealed a significant three-way interaction among cluster, relationship type, and gender for Wave IV alcohol use, $F(6, 1215) = 5.61$, $p < .001$, and serious alcohol problems, $F(6, 1215) = 2.58$, $p < .05$. Based on analyses conducted within gender, cluster mean comparisons are presented in Figures 1 and 2. Among men, there was a significant two-way interaction of relationship type by cluster on alcohol use, $F(6, 527) = 5.52$, $p < .001$, and on serious alcohol problems, $F(6, 527) = 3.18$, $p < .01$. Focusing on the hypothesis concerning congruent and discrepant drinking partnerships, among married men, those in the discrepant male group ($M = 27.41$, $SD = 3.33$) were significantly higher on alcohol use than those in the congruent light group ($M = 9.42$, $SD = 1.52$). Cohabiting men reported significantly higher alcohol use in the congruent heavy group ($M = 36.26$, $SD = 4.16$) compared with all the other clusters. As well, married men reported significantly more alcohol use ($M = 27.41$, $SD = 3.33$) compared with cohabiting men ($M = 13.65$, $SD = 2.57$) but not compared with dating men ($M = 21.08$, $SD = 2.97$) and only in the discrepant male group. Among women, there was no significant interaction of relationship type by cluster; thus, mean differences across clusters were unmodified.

Turning to serious alcohol problems, as shown in Figure 2, within dating and married men, discrepant male cluster members scored higher than congruent light cluster members, consistent with the hypothesis. As well, cohabiting men in the heavy congruent cluster ($M = 0.28$, $SD = 0.05$) scored higher than those men in the congruent light cluster ($M = 0.12$, $SD = 0.02$); however, among married men, those in the discrepant male cluster ($M = 0.41$, $SD = 0.05$) scored higher than those in the discrepant female cluster ($M = 0.09$, $SD = 0.07$). Neither of these patterns supported the hypothesis. In other comparisons, married men reported significantly more serious alcohol problems ($M = 0.41$, $SD = 0.05$) compared with cohabiting men ($M = 0.25$, $SD = 0.04$) but not compared with dating men ($M = 0.35$, $SD = 0.04$), and only in the discrepant male group. Among women, there was no significant interaction between relationship type and cluster. Differences across clusters among women were unmodified by relationship type; that is, women in the congruent heavy cluster were generally those who reported higher levels of serious alcohol problems than those in other clusters. In sum, the cluster difference results were moderated by relation-

FIGURE 1. Wave IV alcohol use as a function of Wave III cluster, relationship, and gender (Cluster 1 = congruent light, Cluster 2 = discrepant male, Cluster 3 = discrepant female, Cluster 4 = congruent heavy). Note: Maximum = 40.

FIGURE 2. Wave IV serious alcohol problems as a function of Wave III cluster, relationship, and gender (Cluster 1 = congruent light, Cluster 2 = discrepant male, Cluster 3 = discrepant female, Cluster 4 = congruent heavy). Note: Maximum = 0.45.

ship type and gender; some findings for men supported the hypothesis, but among women, there was little support for the hypothesis that drinking congruence would weigh more heavily than consumption on later outcomes.

In the primary analyses reported, relationship dissolution was an outcome, one that was associated with couple drinking clusters. However, it is important to consider whether dissolution moderates the associations of couple drinking patterns with other outcomes. If relationship dissolution was simply entered as a predicted moderator into the primary analysis (removing it as an outcome), a four-way interaction would result. Because of nonexistent or very small (< 10) *ns* in some cells, such an analysis was not feasible. As a workaround, analyses were conducted by collapsing across other variables, relationship type and gender. There were no significant multivariate or univariate interaction effects.

Discussion

In the past, cross-sectional data typically have examined couple drinking levels and their associations with problems

for young adults, with only a few studies examining married couples' drinking and relationship quality over time (Homish and Leonard, 2005, 2007). The current study used a longitudinal approach to assess the consequences in adulthood that may result from the various congruent and discrepant drinking partnerships in young adult relationships. Overall, the findings demonstrate that there are multiple types of young adult drinking partnerships associated with alcohol-related problems in adulthood.

The current study found only some support for young adult discrepant couple drinkers to have more problems later in adulthood, even above and beyond related covariates, such as age, ethnicity, education, depression, relationship quality and alcohol negative consequences. Individuals in the light and infrequent cluster had fewer relationship dissolutions, perhaps because drinking was almost nonexistent and played little part in adult problems. Supporting the role of earlier alcohol consumption in later problems, earlier congruent heavy drinking was more often associated with later negative outcomes. These findings are somewhat consistent with those of Torvik et al.'s study (2013), wherein the divorce risk of older couples with two heavy drinkers was higher than that of couples with congruent light drinkers. However, the highest risk occurred when only the wife was a heavy drinker. Leonard et al. (2013) also found highest rates of divorce among partnerships with heavy/discrepant wives. Ostermann et al. (2005) found that couples with two abstainers or with two heavy drinkers had the lowest rates of divorce (unlike our study), and couples with one heavy drinker (discrepant) were most likely to divorce. Thus, additional research is needed to test the congruency factor as well as the level of consumption.

Lower levels of drinking and fewer alcohol-related problems characterized the congruent light couples, and they most often reported the highest levels of healthier outcomes. However, there were no differences across clusters in relationship quality, which is surprising because previous research found that discrepancy was related to more relationship problems, such as lower satisfaction and commitment (e.g., Homish and Leonard, 2007). Perhaps the Add Health measure was inadequate to fully address satisfaction and commitment. With nearly half of the individuals in the sample not in the same relationship from Waves III to IV, it may be that poorer quality relationships broke up and were replaced (at least for the moment) by better ones. However, the findings testing relationship dissolution as either a main or interaction effect were somewhat inconclusive on this point as the cell sizes became too small to test a four-way interaction. Studies with even larger sample sizes than this are needed to further understand the role of contexts to relationship dissolution on outcomes.

Prominent in the findings, and contrary to the main prediction, were the number of negative effects for individuals in the congruent heavy group, which was characterized by

more relationship dissolution, alcohol use, alcohol negative consequences, and serious alcohol problems (but not poorer relationship quality). Consistent with other research (Wiersma et al., 2009), these congruent and heavy drinkers were similar to other clusters on relationship quality at the same time as they reported higher drinking-related issues. It may be that drinking enhances certain young adults' romantic relationships because of compatibility—being together and drinking may be a common interest—but only for so long. As the relationship continues, drinking problems eventually may hinder the relationship, leading to dissolution and possible partner replacement. Future research should explore whether such men and women have serial, highly congruent, heavily drinking relationships where that congruent heavy drinking allows relationship quality to be initially reported as high.

When examining young adult drinking, it was evident that gender, more so than relationship type, played an important role in drinking cluster patterns. Men reported higher rates of alcohol use, alcohol-related consequences, and problems compared with women, which was not surprising. In addition, married men reported higher levels of alcohol use and problems than cohabiting men in the discrepant male group. Outcomes in which relationship type played a part were in alcohol use and serious alcohol problems among men. In the tension between the influences of compatibility and heavy/frequent drinking on outcomes, both appeared to be influential among men in various types of relationships. Interestingly, relationship type was not a factor in outcomes among women.

Women reported much lower levels of alcohol use compared with men, regardless of relationship type or drinking partnership in adulthood. Patterns revealed that the congruent heavy group was the most devastating partnership for women: They reported the highest levels of alcohol-related problems. A strong takeaway point from this research is that congruence in drinking is not protective over time for most outcomes when drinking is heavy and frequent.

Strengths and weaknesses

This study had several advantages over past research. First, the current study explored data from both couple members using a nationally representative sample rather than community samples (Homish and Leonard, 2007) or using only one couple member (Wiersma et al., 2009). The Add Health followed the same individuals from young adulthood into adulthood, which allowed the current study to examine the association of individuals' drinking in earlier types of romantic relationships with their adult behaviors. However, measurement of variables in Add Health can be somewhat limited with fewer items to fully measure concepts, such as relationship quality. In addition, because partner data were not collected during adulthood, there is some uncer-

tainty in matching up the partners from Wave III to Wave IV. Nonetheless, follow-ups on congruent heavy partners were always of a heavy drinker. Follow-ups on discrepant drinkers included the heavier drinking partner approximately 50% of the time. Thus, negative consequences could be weaker in this group if alcohol consumption trumps congruency/discrepancy. Future research should separate consequences for the heavier and lighter drinkers in discrepant clusters. As well, future research would benefit from collecting data from both couple members over time, even if relationship dissolution occurs. With more than 50% of the participants married at Wave IV, it would be possible in future research to examine the transition to marriage from dating and cohabiting in this data set and compare those who transitioned to marriage with those who dissolved relationships.

In conclusion, the current study sheds light on drinking partnerships and identifies particular risks associated with couple drinking patterns among young adults. Men may be at risk for serious alcohol problems later as adults, especially when they pair up with discrepant drinking partners. However, there are also a number of negative effects from congruent heavy drinking, especially for women. Alcohol-related and relationship dissolution risks seem to be higher for those who began young adulthood in a heavy and congruent drinking partnership. Research has only recently begun to examine young adult romantic relationships in terms of alcohol use, but findings highlight more effective ways to monitor romantic experiences surrounding alcohol from young adulthood to adulthood.

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