

## Page Proof Instructions and Queries

**Journal Title:** EA0  
**Article Number:** 563381

Greetings, and thank you for publishing with SAGE. We have prepared this page proof for your review. Please respond to each of the below queries by digitally marking this PDF using Adobe Reader.

Click “Comment” in the upper right corner of Adobe Reader to access the mark-up tools as follows:

For textual edits, please use the “Annotations” tools. Please refrain from using the two tools crossed out below, as data loss can occur when using these tools.



For formatting requests, questions, or other complicated changes, please insert a comment using “Drawing Markups.”



Detailed annotation guidelines can be viewed at: <http://www.sagepub.com/repository/binaries/pdfs/AnnotationGuidelines.pdf>  
 Adobe Reader can be downloaded (free) at: <http://www.adobe.com/products/reader.html>.

No.	Query
	Please confirm that all author information, including names, affiliations, sequence, and contact details, is correct.
	Please review the entire document for typographical errors, mathematical errors, and any other necessary corrections; check headings, tables, and figures.
	Please confirm that the Funding and Conflict of Interest statements are accurate.
	Please confirm you have reviewed this proof to your satisfaction and understand this is your final opportunity for review prior to publication.
AQ: 1	Please provide degree for corresponding author.
AQ: 2	Please provide in-text citation for Table 1.
AQ: 3	Please provide complete reference details for While both Carroll (2007) or allow us to delete the citation.
AQ: 4	Please provide complete reference details for Willoughby (2013) or allow us to delete the citation.
AQ: 5	Please provide location for reference Kreider, R. M., & Ellis, R. (2011). Number, timing, and duration of marriages and divorces, 2009. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.
AQ: 6	Please provide a 2- to 3-sentence bio for each author.

# Changes in Marital Beliefs Among Emerging Adults: Examining Marital Paradigms Over Time

Brian J. Willoughby<sup>1</sup>, Melissa Medaris<sup>1</sup>, Spencer James<sup>1</sup>, and Kyle Bartholomew<sup>1</sup>

Emerging Adulthood  
1-10  
© 2014 Society for the  
Study of Emerging Adulthood  
and SAGE Publications  
Reprints and permission:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/2167696814563381  
ea.sagepub.com



## Abstract

Although research on marital beliefs among emerging adults has increased in recent years, most studies assume that marital beliefs are static features of emerging adulthood. Using a sample of 134 emerging adults in the United States tracked over a 1-year period, we explored if these emerging adults exhibited changes in their marital beliefs over time and what predicted such changes. We found that emerging adults in the sample showed significant growth over the 1-year period in the importance they placed on marriage while at the same time expecting to place less importance on their eventual marital role. Staying single and breaking up with a romantic partner were both related to decreases in marital salience, while cohabiting between data collections was associated with decreases in marital centrality. Finally, stronger marital salience at Time 1 was predictive of decreased binge drinking at Time 2, net of Time 1 assessments of such behavior. Such findings validate previous theoretical assumptions regarding marital beliefs.

## Keywords

marital paradigms, marital beliefs, attitudes, emerging adults, binge drinking

The average age of marriage has increased over the last few decades (Kreider & Ellis, 2011) and many individuals now delay marital transitions until after 30 (Copen, Daniels, Vespa, & Mosher, 2012), leaving some scholars wondering if marriage remains a salient factor during emerging adulthood. Despite the diminishing number of marital transitions during emerging adulthood, this time continues to present individuals with an opportunity to navigate romantic relationships. For example, Carroll and colleagues (2007) suggest that emerging adulthood is a period to explore love, educational pursuits, and work opportunities in ways that differ from other developmental periods, while other scholars note the unique dynamics of and trajectories through romantic relationships during emerging adulthood (Shulman, & Connolly, 2013).

As emerging adults experiment with relationships, marriage likely remains an important factor despite its lack of proximity for many emerging adults. Despite nearly two thirds of emerging adults reporting they do not feel ready to get married (Carroll et al., 2009), emerging adults as a whole largely endorse marriage (Whitehead & Popenoe, 2001) and expect to marry in the future (Thornton & Young-DeMarco, 2001). In addition, although recent empirical evidence suggests that a growing number of emerging adults no longer feel that marriage is an important step to becoming an adult (Carroll et al., 2007; Nelson & Barry, 2005), perceptions about future marriage play an important role in determining

emerging adult behavioral patterns. Beliefs about marriage during emerging adulthood are linked to sexual decision making (Willoughby & Dworkin, 2009), decisions to enter or exit relationships (Rhoades, Kamp Dush, Atkins, Stanley, & Markman, 2011), and risk-taking behaviors such as binge drinking and drug use (Willoughby & Dworkin, 2009). Several scholars (see Carroll et al., 2007; Willoughby, Hall, & Luczak, 2013) argue that marital beliefs held during the early 20s may place emerging adults on differing relational trajectories and help define the entire emerging adult period as such beliefs intersect with relationship decisions.

Recent scholarship suggests that marital beliefs play an important part in emerging adult development, but several key limitations still exist. First, marital belief scholarship has long assumed that emerging adults' beliefs about marriage remain static and unchanging, despite evidence that such beliefs change during adolescence (Willoughby, 2010). Also, the vast majority of scholarship on marital beliefs within emerging adulthood utilizes cross-sectional measurement. As such, it has

<sup>1</sup>Brigham Young University, Provo, UT, USA


## Corresponding Author:

Brian Willoughby, Brigham Young University, 2081 JFSB, Provo, UT 84602, USA.

Email: brian.willoughby@byu.edu



AQ2


 Table 1. Bivariate Correlations, Means, and Standard Deviations for Predictor Variables.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Female	.65	.48	—											
2. White	.91	.29	.153	—										
3. Parents married	.66	.48	-.103	.048	—									
4. Heterosexual	.87	.34	.047	-.121	.053	—								
5. Church attendance	2.63	1.04	-.009	-.149	.076	.086	—							
6. Cohabitation in last year	.22	.41	.132	-.082	-.177*	-.063	-.162	—						
7. Sexual partners (Committed) last year	1.79	1.80	-.103	.050	.067	-.077	-.083	-.067	—					
8. Sexual partners (Casual) last year	2.81	4.58	.077	-.063	.002	-.065	-.030	-.031	.299**	—				
9. Expected age of marriage Time I	26.96	7.62	-.090	.057	-.145	-.237**	-.054	.103	-.068	-.054	—			
10. Marital salience Time I	2.55	.72	.045	-.057	.165	.216*	.434**	-.071	-.079	-.067	-.348**	—		
11. Marital permanence Time I	3.40	1.39	-.073	-.092	.167	.188*	.458**	-.220**	-.081	-.049	-.240**	.370**	—	
12. Employment hours Time I	8.20	11.00	.080	.069	-.098	.137	.037	.125	-.051	-.102	.255**	.011	-.072	—

\* $p < .05$ . \*\* $p < .01$ .

been impossible to determine causal mechanisms between marital beliefs and developmental outcomes. This study sought to address these limitations by being the first study to examine marital belief changes over time during emerging adulthood. We also examined the demographic and relational predictors of such changes to better understand the dynamic relationship between marital beliefs and relational decisions during emerging adulthood. Finally, we explored if marital beliefs are associated with longitudinal changes in alcohol use and sexual behavior over time to expand on previous research that has linked such beliefs to emerging adult risk taking within cross-sectional samples.

### Marital Belief Theory During Emerging Adulthood

Although scholars have recently presented empirical evidence that marital beliefs are associated with important indicators of well-being among emerging adults, theoretical advancement in this area of scholarship has also improved with several theories being proposed to help conceptualize why marital beliefs may be related to emerging adults' behavior. Among the first proposed theories were Carroll and colleagues' (2007) marital horizon theory. Marital horizon theory suggests that one's marital horizon is comprised of three related dimensions. The importance of marriage, the desired timing of marriage, and finally the criteria one holds for marriage readiness, or what a person feels they need to have accomplished prior to marriage, are all argued to be pivotal components of how emerging adults view marriage (Carroll et al., 2007). Marital horizon theory also served as the foundation for later theoretical developments, eventually helping contribute to the recently proposed marital paradigm theory (Willoughby et al., 2013), a conceptual framework building off the ideas of Carroll and generalizing them beyond just emerging adulthood.

Drawing on not only marital horizon theory but also on general concepts from symbolic interactionism (Blumer, 1979), marital paradigm theory argues that individuals will draw on the meaning being placed on events such as marriage when faced with behavioral decisions that may impact their future marriages. For example, research findings showing that an earlier ideal age of marriage among emerging adults is linked with less binge drinking (Carroll et al., 2007) may be explained by the fact that emerging adults who desire to marry may be limiting behavior they deem to be incompatible with a marriage they believe is in their near future. Willoughby, Hall, and Luczak (2013) suggest that one's marital paradigm (the global way one thinks about marriage) is divided into two main belief contexts, namely, ~~Beliefs~~ beliefs about getting married and beliefs about being married. Each of these dimensions is then further divided into three specific dimensions. The "beliefs about getting married" dimension is divided into beliefs about marital timing, marital salience (importance), and marital context. The "beliefs about being married" dimension is divided into beliefs about marital process, marital permanence, and marital centrality.

Marital paradigm theory suggests that these six dimensions have both an indirect and a direct influence on one's individual and relational behaviors and that the indirect relationship is connected to the influence of general beliefs on one's specific intentions to engage in such behaviors (Willoughby et al., 2013). In other words, one's global and generalized beliefs about marriage will influence the specific attitudes and intentions about behaviors such as sexual activity, risk taking, and dating. These shifting intentions will lead to varying behavioral trajectories by increasing or decreasing the probability of engaging in such behavior. Thus, it is suggested that marital beliefs influence the daily decisions of emerging adults even if actual marital transitions were in the distant

future, a conclusion now supported by several studies linking such beliefs to emerging adult behavior (Carroll et al., 2007; Clarkberg, Stolzenberg, & Waite, 1995; Mahay & Lewin, 2007). Similar evidence is also found during adolescence where an adolescent's expected age of marriage is related to engagement in serious relationships (Crissey, 2005). Carroll and colleagues (2007) likewise document that those with relatively close marital horizons also report lower risk-taking attitudes and behaviors such as less sexual permissiveness, less drinking, and less drug use.

### *Current Limitations in Scholarship*

Despite these recent advances in the empirical and theoretical scholarship seeking to understand marital beliefs during emerging adulthood, several key limitations exist in this area of scholarship. First, as noted by Willoughby (2010), almost all scholarship on marital beliefs assumes that such beliefs are static factors and change little over time. However, Willoughby (2010) showed that marital beliefs across adolescence are not stable as previously assumed. He found that the older and closer to emerging adulthood individuals become, the more importance they begin to place on marriage and the more they expect to marry in the future. This challenged previous research that suggests marital attitudes are unchanging over time (Cunningham & Thornton, 2006; Sassler & Schoen, 1999). However, it is currently unknown if such changes are merely a by-product of adolescence or if changes continue throughout emerging adulthood. The first goal of this study was to assess these previously unexplored questions by examining if marital beliefs change over a 1-year period in emerging adulthood.

Drawing on marital paradigm theory (Willoughby et al., 2013), we utilize four assessments of marital beliefs in this study, two about getting married (marital salience and timing) and two about being married (centrality and permanence). Marital salience refers to beliefs one has about the importance of marrying and being married as well as the global importance placed on the institution of marriage. Marital timing beliefs include beliefs about the ideal and expected age of marriage. Beliefs about marital centrality entail beliefs about one's current or future spousal role and how such a role will be given priority compared to other adult responsibilities such as parenting or career goals. Finally, beliefs about marital permanence focus on an individual's beliefs about the commitment involved in marriage, how permanent marital relationships should be, and one's attitudes toward the acceptability of divorce. Due to previous findings in adolescence that suggest marital beliefs become more positive over time, we tested the following specific hypothesis:

**Hypothesis 1:** Marital beliefs among emerging adults will become more positive over time with emerging adults increasing in their beliefs regarding the salience of marriage, the permanence of marriage and the centrality of marriage as well as expecting to marry earlier.

To further expand this scholarship, we also explored both the demographic and the relationship contexts that may influence such marital belief changes. The relational context of emerging adults is unique compared to both the developmental periods that precede it and follow it. As emerging adults leave adolescence, they begin to focus and participate in more commitment-based relationships that may not be present during adolescence (Montgomery, 2005). As noted by Shulman and Connolly (2013), many emerging adults are actively involved in committed and long-term romantic relationships that often involve cohabitation but may or may not lead into marriage. Not only are emerging adults beginning to engage in such long-term relationships, but many also become more involved in sexual relationships with casual partners or friends (Claxton, & van Dulman, 2013; Kaestle, & Halpern, 2007). This increased involvement with multiple sexual partners is an important shift during emerging adulthood, as evidence suggests that sexual intimacy during this time period may begin to play an important role in determining relational trajectories throughout the 20s (Meggiolaro, 2010). These relational experiences (or lack thereof) that emerging adults accumulate may not lead to actual marital transitions among current emerging adults but may shift such emerging adults' long-term aspirations and plans for marriage (Lanz, & Tagliabue, 2007; Shulman & Connolly, 2013). Indeed, relational experiences such as dating or cohabiting are likely correlates of marital beliefs, as previous research suggests that relational experience can impact global perceptions. For example, Rhoades, Kamp Dush, Atkins, Stanley, and Markman (2011) found that relationship breakups are related to psychological distress and lower perceptions of global life satisfaction. This may suggest that ending romantic relationships may lead to more pessimistic views of relationships in general, including marriage. Although previous research may suggest such associations between relational experiences and shifts in marital beliefs, they remain largely untested.

Previous findings also suggest that demographic factors during emerging adulthood are associated with differing marital beliefs. Such research found that marital beliefs differ based on both gender (Blakemore, Lawton, & Vartanian, 2005; Plotnick, 2007) and race (Gibson-Davis, Edin, & McLanahan, 2005) with females and Caucasians being more likely to endorse positive marital beliefs. Willoughby (2010) found that female adolescents had slower increases in positive marital beliefs over time compared to males, a finding attributed to a ceiling effect among women. Based on these findings we propose the following additional hypothesis:

**Hypothesis 2:** Being Caucasian, male, maintaining a romantic relationship, and cohabiting will be associated with increasingly positive marital beliefs (earlier expected marital timing, greater marital salience, and greater belief in marital permanence) over time.

In addition, another key limitation of the current scholarship is that despite theoretical conclusions assuming that marital beliefs will change individual behaviors (see Carroll et al.,

2007; Willoughby et al., 2013), to date, no study has explored associations between marital beliefs and outcomes outside a cross-sectional setting. Although previous studies found links between marital beliefs and emerging adult behavior (Clarkberg et al., 1995; Mahay & Lewin, 2007; Willoughby, 2014; Willoughby & Dworkin, 2009), such studies are cross-sectional in nature and thus unable to establish such associations with behavioral change longitudinally. To address this limitation, we explored how marital beliefs predict behaviors during emerging adulthood 1 year later while controlling for baseline behavior. We elected to explore both alcohol use and sexual behavior as previous empirical work suggests these factors are associated with marital beliefs in cross-sectional analyses among emerging adults (Carroll et al., 2007, 2009). Specifically, we explored how marital beliefs at Time 1 predict changes in general alcohol use, binge drinking, sexual intercourse behavior, and pornography use 1 year later. While pornography use is often not a partnered sexual behavior, Carroll and colleagues (2008) show that pornography use is associated with marital and family formation attitudes among emerging adults, specifically that emerging adults who used pornography are more likely to have a later expected age of marriage. Based on assumptions of both marital horizon theory (Carroll et al., 2007) and marital paradigm theory (Willoughby et al., 2013) that marital beliefs will change individual behavioral decisions, we explored the following hypothesis:

**Hypothesis 3:** Higher marital salience, centrality, and permanence beliefs and an earlier expected age of marriage at Time 1 will predict decreases in general alcohol use, binge drinking, pornography use, and sexual intercourse over a 1-year time period.

Finally, previous research on marital beliefs suggests that some demographic factors may moderate relationships between emerging adults' relationship beliefs and current behaviors and outcomes. For example, Willoughby and Carroll (2010) found that associations between sexual behavior and attitudes toward cohabitation are moderated by religiosity in that the associations between attitudes and behaviors are stronger among the highly religious. Carroll and colleagues (2007) also found that associations between marital beliefs and risk-taking behaviors differ by gender. Due to these associations, we likewise explored if religiosity and gender moderated relationships between predictors of marital belief changes and marital beliefs and tested the following hypothesis:

**Hypothesis 4:** Religiosity and gender will moderate associations between demographics, relational experiences, and changes in marital beliefs.

## Method

### Participants and Procedure

The longitudinal sample for this study consisted of 134 unmarried emerging adults from a large public university in the

Midwest that were followed over a 1-year period. Students were sampled from a larger study of undergraduates at Time 1, who were included in a university-wide research pool and were sent an e-mail from the research team inviting them to participate in an online survey on relationships. If students agreed to participate, they were given additional information on the study and asked to indicate informed consent before proceeding to the survey itself. This sample was then contacted 1 year later through e-mail and asked if they would be willing to take a follow-up online survey. Participants who completed this second survey were all given US\$25 gift cards as incentive for completing the survey. Twenty-five percent of the initial sample agreed to participate. Participants who elected to participate at Time 2 did not differ from those who did not in terms of age, educational level, parents income, hours of employment, number of children, grade point average, ideal timing of marriage, or general importance of marriage. Participants who completed Wave 2 also did not differ from those who did not in terms of race or sexual orientation but did differ on gender. Participants at Wave 2 were more likely to be female,  $\chi^2(2) = 9.91, p < .01$ . Study design and data collection were approved and overseen by the institutional review board at the project investigator's university.

The Time 1 sample was primarily female (75%) and White (90%). Racial distribution in the sample mirrored that of the university as a whole. The average age at Time 1 was 20.82 ( $SD = 3.53$ ). At Time 2, 72% of the sample reported they were currently full-time students and 20% reported they were not currently enrolled in any schooling. A majority of the sample reported they were working one job part time (36%) or one job full time (26%) and the average number of working hours per week was 8.20 ( $SD = 11.00$ ). Eighty-seven percent of the sample identified as heterosexual. The most common religious denomination listed was Conservative Christian (21.6%), followed by Liberal Christian (20.9%), Roman Catholic (20.9%), No Affiliation (10.9%), Atheist (8.7%), and Agnostic (7.2%). Most (65.7%) of the sample reported that their parents were married.

### Measures

**Marital Paradigms.** We assessed four dimensions of beliefs about getting and being married. One item was used to assess *Marital Timing*, asking all participants "At what age do you expect to marry?" *Marital Salience* was assessed by averaging responses on 6 items. These items included: "Getting married is more important to me than having a successful career," "Getting married is more important than my educational pursuits and achievements," "Getting married is among my top priorities during this time in my life," "All in all, there are more advantages to being single than to being married (reverse coded)," "Getting married is a very important goal for me," and "I would like to be married now." Agreement with these items were measured on a 6-point scale (1 = *very strongly disagree*; 6 = *very strongly agree*). These items showed strong internal reliability ( $\alpha = .85$ ). A single item assessment, adapted from

a measure developed by Kerpelman and Schvaneveldt (1999), was used to assess *Marital Centrality*. Participants were asked to indicate how much importance they expected to place on the following aspects of their life in the future: marriage, parenting, career, and personal leisure/hobbies. Participants were asked to assign a percentage importance to each of these four areas with the total adding to 100%. The percentage of importance placed on marriage was utilized in this study as a continuous measure and allowed for an assessment of the relative centrality of one's future marital role compared to other adult roles and obligations. *Marital Permanence* was assessed by averaging 3 items, each assessed on the same 6-point scale (1 = *not true at all*; 6 = *very true*). These items were "Personal happiness is more important than putting up with a bad marriage (reverse coded)," "It is okay to divorce when a person's needs are no longer met (reverse coded)," and "Marriage is for life, even if the couple is unhappy." Higher scores indicated greater belief in marital permanence. These items also showed strong internal consistency ( $\alpha = .82$ ).

**Demographics.** The demographics in this study were calculated by asking participants to give their age, gender (female, male), sexual orientation (*heterosexual* = 1; *Other [lesbian, gay, and bisexual]* = 0), parental income (1 = *none* and 8 = *over US\$250,000*), race (*white* = 1; *other* = 0), employment status, parents' marital status (*married* = 1, *other* = 0), and religious attendance. Religious attendance was measured by asking: "During the past month how many days did you attend a church/worship service?" This item was assessed on a 5-point scale that ranged from 0 (*None*) to 4 (*Every day or almost every day*). The average ( $M = 2.63$ ) suggested that many participants attended church about once a month. Employment status was assessed by asking participants how many hours of paid employment they worked per week on average.

**Relationship context changes.** In this study, relationship contexts were calculated using both Time 1 and Time 2 data. *Dating status changes* were calculated by the question "Which best describes your current dating status?" Possible responses included "not dating at all," "casual/occasional dating," "have a boy/girlfriend (in a committed relationship)," "engaged or committed to marry," and "married." Participants were coded into four groups, that is, those who were in committed relationships at both time points (defined as any response other than "not dating at all" and "casual/occasional dating"), those who were in a committed relationship at Time 1 but not Time 2, those who were single at Time 1 but in a committed relationship at Time 2, and those who were not in a committed relationship at both time periods. Those in a committed relationship at Time 1 and Time 2 served as the reference group for all analyses. To assess cohabiting between data collection waves, the number of lifetime cohabiting partners was asked at times one and two with the following item: "how many romantic partners have you ever lived with?" Responses at Time 1 were subtracted from responses at Time 2 to assess how many additional romantic partners they lived

with within the last year. The number of sexual partners in a committed relationship between the two waves of data was assessed by the question, "With how many partners have you ever had sexual intercourse within a committed relationship?" The number of casual sexual partners was measured by asking, "With how many people have you ever had sexual intercourse outside of committed relationship (i.e., hooked-up/casual sex)?" These items were asked at both waves and the number of partners during the year of data collection both within and outside of a committed relationship was calculated by subtracting the number of partners reported at Time 1 from those reported at Time 2.

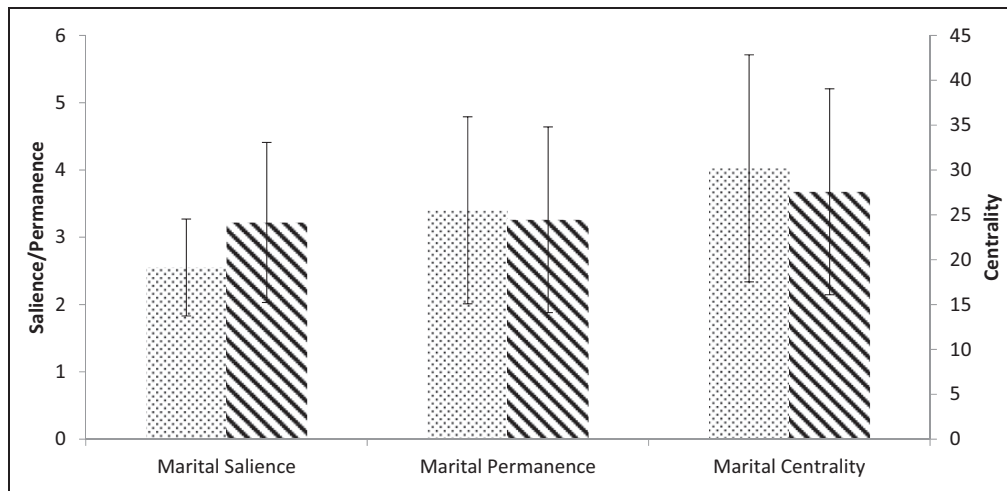
**Behavioral assessments.** Emerging adult behaviors were assessed by asking the question, "During the past month, on how many days did you engage in the following behaviors?" The participant then rated how often they participated in these activities on a scale of 0 (*None*) to 4 (*Ever day or almost every day*). Behaviors used in this study included "engaging in sexual intercourse," "binge drinking," "drink alcohol," and "view pornography (online or offline, such as movies, websites, magazines, and/or strip clubs)."

## Results

### Differences in Marital Beliefs

Differences in marital beliefs across the two waves were first descriptively examined to assess and test Hypothesis 1. Differences across marital salience, permanence, centrality, and timing were all examined. Paired sample *t*-tests showed that significant changes occurred between Time 1 and Time 2 on assessments of both marital salience,  $t(131) = -8.91, p < .001$  and marital centrality,  $t(132) = 2.55, p = .01$ . No significant differences were found for marital timing or marital permanence. Emerging adults reported significant growth in their marital salience from Time 1 ( $M = 2.54, SD = .72$ ) to Time 2 ( $M = 3.22, SD = 1.19$ ) although variability in the scale also increased between the two time points. However, emerging adults also reported a significant decrease in their marital centrality from Time 1 ( $M = 30.18, SD = 12.65$ ) to Time 2 ( $M = 27.56, SD = 11.52$ ). See Figure 1, for a visual depiction of these trends. This provided partial evidence of Hypothesis 1.

In order to see if these baseline mean changes across waves held with controls or differed as a function of demographic factors, main effects of time and interaction terms between time and demographic factors (gender, race, parent's marital status, religious attendance, and sexual orientation) were examined in a repeated measure multivariate analysis of covariance model. Prior to this analysis, we also explored bivariate correlations between demographic control variables and changes in marital beliefs. These results suggested that religious attendance was associated with an increase in marital salience ( $r = .225, p = .01$ ). The overall model effect of time was not significant in these models, Wilks  $\Lambda = .983, F(2, 124) = 1.08, p = .34$ , once controls were included in the



**Figure 1.** Changes in marital salience, timing, permanence, and centrality across Waves 1 and 2. Changes in marital salience and marital centrality were significant ( $p < .05$ ).

models suggesting that the increase in marital salience and decrease in marital centrality was largely accounted for by religiosity. Estimated means on marital salience from Time 1 ( $M = 2.52$ ) to Time 2 ( $M = 3.23$ ) were still significantly different ( $p < .001$ ) after holding controls constant. A similar significant ( $p = .009$ ) result was found on measures of marital centrality, where estimated means decreased from Time 1 ( $M = 30.14$ ) to Time 2 ( $M = 27.36$ ) after holding controls constant.

Only one significant interaction was found between time and religious attendance when examining changes in marital salience,  $F(1, 125) = 4.74, p = .03$ . To explore this interaction, the sample was split between those emerging adults who attended and those who did not attend religious services. Results suggested that for those who reported no current religious attendance, marital salience significantly increased ( $p = .001$ ) from Time 1 ( $M = 2.38$ ) to Time 2 ( $M = 2.88$ ). For those who did currently attend religious services, marital salience also significantly ( $p < .001$ ) increased from Time 1 ( $M = 2.76$ ) to Time 2 ( $M = 3.70$ ). Although results were significant for both groups, there appeared to be accelerated increase in marital salience among those who attended religious services. This provides partial support for Hypothesis 4.

### Predictors of Marital Belief Change

To test Hypothesis 2, hierarchical regression models were used to predict changes in marital salience, timing, centrality, and permanence across the two waves of data collection. Changes in marital beliefs were examined by predicting Time 2 beliefs while controlling for Time 1 baseline measures of those same beliefs. Gender, parent's marital status, race, religious attendance, average hours of paid employment, and sexual orientation were all examined as possible demographic correlates of marital belief changes over time in the first block of regression models while relational behaviors and experiences between the two data collections, including committed and casual sexual

partners during the year, relationship status changes, and cohabiting during the last year, were entered into the second block of the regression model. Examination of regression models for the prediction of marital permanence changes suggested that only sexual orientation ( $b = .535, t = 2.06, p = .04$ ) was significantly related to changes in marital beliefs in that heterosexual participants showed a significant increase in marital permanence. For the model predicting changes in marital timing, staying single across both data waves was associated with a significant increase in expected marital timing ( $b = 1.67, t = 2.16, p = .03$ ). For the model predicting changes in marital centrality, cohabiting in the last year ( $b = -6.16, t = -2.73, p = .007$ ) and hours of paid employment ( $b = -1.60, t = -1.96, p = .05$ ) were significantly associated with changes in marital centrality in that the experience of cohabiting during the year between data collections and more hours of paid employment were associated with a significant decrease in marital centrality.

Models predicting marital salience changes across the two waves produced several significant results. Final model estimates are displayed in Table 2. The initial block of demographic variables and baseline marital salience beliefs significantly predicted changes in marital salience, adjusted  $R^2 = .542, F(7, 120) = 22.48, p < .001$ . Examination of regression coefficients suggested that being female ( $b = .306, t = 2.03, p = .04$ ) and higher religious attendance ( $b = .137, t = 2.14, p = .03$ ) were associated with significant increases in marital salience over the two waves of data. The addition of relational behavior predictors explained significant variance in the predictive model beyond demographics,  $R^2\Delta = .050, F(6, 114) = 2.51, p = .026$ , adding roughly another 5% explained variance (adjusted  $R^2 = .574$ ). Staying single across waves ( $b = -.393, t = -2.28, p = .03$ ) and going from in a relationship to single across the waves ( $b = -.791, t = -2.75, p = .007$ ) were associated with significant decreases in marital salience compared to remaining in a committed relationship across the two waves. Interactions were tested

**Table 2.** Hierarchical Regression Models Predicting Time 2 Marital Salience From Demographics and Relational Experiences.

Variable	Model 1			Model 2		
	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$
Marital salience (Time 1)	1.12**	.109	.667	1.11**	.107	.660
Female	.306*	.151	.125	.312*	.152	.128
White	.009	.249	.002	-.325	.260	-.081
Parents married	.109	.153	.045	.008	.151	.003
Heterosexual	.042	.222	.012	-.062	.218	-.018
Employment hours (Time 1)	-.006	.007	-.052	-.008	.007	-.071
Church attendance	.137	.064	.139*	.081	.065	.083
Relationship status change						
In relationship—in relationship						(Reference)
In relationship—single				-.791**	.288	-.196
Single—single				-.393*	.173	-.157
Single—in relationship				.013	.231	.004
Cohabit during last year				-.347	.182	-.125
Sexual partners (Committed)				.017	.076	.014
Sexual partners (Casual)				-.011	.020	-.036
	$R^2 = .539$			$R^2 = .572$		

\* $p < .05$ . \*\* $p < .01$ .

between gender and religiosity to see if effects varied by gender and no significant interactions were found. These results provide partial support for Hypothesis 2 but no support for Hypothesis 4.

### Behavioral and Attitudinal Correlates of Changes

To test the third hypothesis, new regression models were created to test how marital beliefs at Time 1 might predict behavioral changes across the waves of data collection. Changes in binge drinking, general alcohol use, pornography use, and sexual intercourse behavior were examined in separate models by predicting Time 2 outcomes while controlling for Time 1-baseline measures of those same behaviors. Models included controls of gender, religious attendance, parents' marital status, race, and sexual orientation as in previous analyses. Estimates of marital salience, permanence, and timing were also entered into the model in a second step. Preliminary analyses also included measures of marital centrality, but examination of model fit estimates suggested that assessments of marital salience and centrality were correlated highly ( $r = .68$ ) and were causing multicollinearity problems with the model (tolerance: marital salience = .63; marital centrality = .63). Due to these findings, marital centrality was dropped from the final models.

Final results are shown in Table 3. Overall, the full model predicting binge drinking at Time 2 with controls predicted

roughly 42% of the variance in Time 2 binge drinking behaviors, adjusted  $R^2 = .42$ ,  $F(9, 120) = 11.55$ ,  $p < .001$ . In addition to Time 1 binge drinking, both greater religious attendance ( $b = -.170$ ,  $\beta = -.174$ ,  $t = -2.28$ ,  $p = .024$ ) and marital salience ( $b = -.323$ ,  $\beta = -.194$ ,  $t = 2.44$ ,  $p = .016$ ) at Time 1 were significantly associated with decreases in Time 2 binge drinking. Both greater attendance at church and higher marital salience at Time 1 were associated with decreases in binge drinking by Time 2. For models predicting general alcohol use, only marital permanence ( $b = .149$ ,  $\beta = .180$ ,  $t = 2.09$ ,  $p = .039$ ) was significantly associated with Time 2 behavior after controlling for Time 1 use. Greater belief in marital permanence at Time 1 was significantly associated with greater increases in alcohol use at Time 2.

When predicting pornography use, several variables significantly predicted increases or decreases in behavior. Increases in pornography use at Time 2 were predicted by greater marital permanence beliefs at Time 1 ( $b = .183$ ,  $\beta = .176$ ,  $t = 2.62$ ,  $p = .010$ ). Decreases in pornography use were predicted by being female ( $b = -.560$ ,  $\beta = -.187$ ,  $t = -2.75$ ,  $p = .007$ ) and being White ( $b = -.837$ ,  $\beta = -.169$ ,  $t = 2.95$ ,  $p = .004$ ). The model predicting sexual intercourse suggested that Time 1 demographics and marital beliefs did not significantly predict Time 2 sexual intercourse after controlling for Time 1 sexual intercourse behavior, adjusted  $R^2 = .28$ ,  $F(9, 120) = 6.63$ ,  $p < .001$ .

### Discussion

Results from this study offer many important insights into the marital beliefs of emerging adults and begin to address many of the limitations of previous scholarship. First, results indicated that, like beliefs about marriage during adolescence (Willoughby, 2010), some beliefs about marriage during emerging adulthood appear to be fluid and changing. Given that our study examined emerging adults during only a 1-year period, such changes suggest that marital beliefs may be much more susceptible to shifting than previously thought. Specifically, beliefs related to both marital salience and centrality showed significant changes over the 1-year period between data collection waves. Willoughby (2010) had previously shown that as adolescents moved toward emerging adulthood, beliefs about marriage became generally more positive. Results here show that a similar pattern occurs during emerging adulthood in that unmarried emerging adults appears to also, on average, place more importance on getting married over time. Additionally, some limited evidence suggested that this increase may be even stronger among more religious emerging adults. It should be noted however, that the variation in marital salience also increased from Time 1 to Time 2, suggesting that some emerging adults may also be decreasing their marital salience and future research should further explore possible subgroup variations in how marital salience shifts across time among emerging adults. Changes in marital centrality followed the opposite pattern, with emerging adults expecting to place less priority on their future marital role over time.



**Table 3.** Final Models Predicting Time 2 Behaviors From Demographics and Time 1 Marital Beliefs While Holding Time 1 Behavior Constant.

Variable	Alcohol Use			Binge Drinking			Pornography Use			Sexual Intercourse		
	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$
Time 1 behavior	.529**	.07	.566	.635**	.07	.617	.636**	.08	.611	.553**	.08	.552
Female	-.028	.18	-.012	.103	.17	.042	-.560**	.20	-.187	.197	.24	.064
Parents married	-.052	.18	-.021	.147	.17	.060	-.198	.17	-.066	.344	.24	.112
Heterosexual	-.165	.26	-.048	-.122	.25	-.034	.004	.27	.001	-.006	.35	-.001
Church attendance	-.135	.08	-.141	-.170*	.07	-.174	-.124	.08	-.103	-.094	.10	-.077
White	.232	.29	.059	.058	.28	.014	-.837**	.28	-.169	.339	.39	.067
Expected age of marriage	-.005	.01	-.035	-.014	.01	-.092	.021	.01	.113	.002	.02	.010
Marital salience	-.231	.14	-.141	-.323*	.13	-.194	-.132	.13	-.064	-.265	.18	-.128
Marital permanence	.149*	.07	.180	.115	.07	.136	.183*	.07	.176	.089	.10	.085
	$R^2\Delta = .029$			$R^2\Delta = .035$			$R^2\Delta = .032$			$R^2\Delta = .015$		

Note. *SE* = standard error.  $R^2\Delta$  values are for Step 2 of models, which included expected marital timing, marital salience, and marital permanence.

\* $p < .05$ . \*\* $p < .01$ .

Such differences in the direction of belief changes between marital salience and centrality may actually help explain some previous patterns in belief and behavioral scholarship. Although emerging adults continue to delay marital transitions (Copen et al., 2012) and see themselves as unready to marry (Carroll et al., 2009), evidence from this study and others (Thornton & Young-DeMarco, 2001) continues to suggest that emerging adults place a high importance on marriage and expect to eventually marry someday. Perhaps the results suggest that modern emerging adults are creating a marriage paradox for themselves, as they begin to place more importance on getting married yet less importance on their future spousal role compared to other obligations in life. Other scholars have noted that current cohorts of emerging adults may experience internal conflict as they attempt to balance educational, career, and relational goals (Shulman & Connolly, 2013), and these results suggest that such internal conflicts may increase as emerging adults approach the age of normative marital transitions. Further research should be conducted to explore how such beliefs continue into marriage and how they may influence marital dynamics and satisfaction as adults are forced to make decisions regarding how to divide resources among various adult roles.

It is also possible that this pattern may be unique to the college-educated sample utilized in this study and that less educated emerging adults may have differing marital belief trajectories that should be explored in future studies. Specifically, college-educated emerging adults may be expecting to begin placing more importance on their future career role as they develop and maintain a stronger career identity throughout college. Indeed, while the importance of one's future marital role in the current sample dropped from Time 1 to Time 2, the importance of a future career role grew from Time 1 ( $M = 25.62$ ) to Time 2 ( $M = 27.64$ ). In this way, such emerging adults are not lowering their value on future marriages but the value of future careers may be increasing in relative importance. A more detailed exploration of marital centrality patterns among emerging adults that expands beyond the one

item measurement of this study may shed light on these issues moving forward.

Results exploring the predictors of belief changes suggested that both religious contexts and relational experiences are important predictors of marital salience changes. In particular, emerging adults who engaged in religious behavior were more likely to report increases in their marital salience over time and as noted previously may have accelerated change in marital beliefs compared to less religious emerging adults. Religious attendance also largely explained sample-wide changes in marital beliefs across the two time points. Although previous studies link religious behavior and religiosity with positive beliefs about marriage (Dollahite, Hawkins, & Parr, 2013), present results are among the first to suggest that such engagement in religious activities may reinforce and strengthen one's commitment to get married over time although results in this study were mixed. Further examination of these trends is needed to help explain why religion appears to be an important correlate of marital belief changes.

In line with marital paradigm theory (Willoughby et al., 2013) and symbolic interaction theory (Blumer, 1979), experiences in relationships appear to alter one's belief system related to marriage. In general, results suggested that negative relationship experiences or the lack of experience (breaking up, remaining single) were associated with a decrease in marital salience over time, while staying single was associated with an increased expected marital timing. Regardless of the specific explanation of these trends, which is beyond the scope of this specific data set, a broader implication of these findings is that dating experience in general appears to be connected to larger beliefs about marriage. When connected to other findings showing that marital beliefs as far back as adolescence predict the timing of eventual marital transitions (Willoughby, 2010), it would appear as though emerging adults' relationship patterns and histories may alter their marital beliefs, which in turn may alter actual trajectories into or without marriage. In other words, each relationship an emerging adult engages in, regardless of if that relationship results in

marriage, may have important implications for family formation trajectories. As noted earlier, emerging adulthood is a unique time of both romantic and sexual relationships (Claxton, & van Dulman, 2013; Shulman, & Connolly, 2013). Although the shifts in romantic relationships during emerging adulthood have largely been explored within the context of how they may shape short-term and proximate outcomes, such findings suggest that scholars may wish to explore how variations in dating and romantic partnerships during emerging adulthood may reshape trajectories toward or away from marriage. Current research only suggests and hints at such larger implications for the study of emerging adulthood but also offers important guides for future scholars to continue to explore the dynamics between emerging adult behavior, beliefs, and trajectories.

Of additional special note is the association found between cohabiting experience and changes in marital beliefs, specifically a decrease in marital centrality. Although some limited evidence and some scholars suggest that the experience of cohabiting is associated with varying commitment levels and beliefs about marriage (Rhoades, Stanley, & Markman, 2006), research to this point has been limited in this area. This finding, while only a small part of this study, may provide additional motivation for relationship scholars to explore the specific impact that cohabitation may have on relational and marital beliefs.

Finally, extending previous findings (Willoughby & Dworin, 2009), and providing new validation for both marital horizon theory (Carroll et al., 2007) and marital paradigm theory (Willoughby et al., 2013), results suggest for the first time that marital beliefs are linked to longitudinal changes in emerging adult behavior. In particular, beliefs about marital salience were linked to binge drinking behavior 1 year later, net of baseline drinking behavior, while beliefs about marital permanence predicted changes in both general alcohol use and pornography use. Although both Carroll (2007) and Willoughby (2013) argue that marital beliefs among emerging adults are impacting daily decisions via anticipatory socialization, results from this study provide the first longitudinal evidence of such an effect. Although this likely does not exclude the possibility of a reciprocal relationship between marital beliefs and behaviors, it does provide the next step in addressing the gaps in the previous scholarship. Scholars should continue to explore the longitudinal relationships between these variables to further understand their influence on each other over time and continue to theorize why such connections may exist.

Despite addressing many of the gaps and limitations in previous marital belief scholarship, this study has several important limitations to consider. First, while not all participants were college students at Wave 2, the sample originated from a university and thus is likely not generalizable to noncollege emerging adults. Although this limits the generalizability of the results, the fact that some emerging adults at Time 2 had left school provides for a slightly more diverse sample than typical college-based samples. Additionally, the sample was

predominately female and White and care should also be taken before generalizing finding beyond these populations. This may be especially true in regard to racial diversity, as our low numbers of minorities may have limited our ability to detect racial differences. In addition, although the measures utilized in this study have been utilized in previous studies and have shown adequate reliability and validity, previous scholars (Carroll et al., 2007; Hall, 2006; Willoughby, 2010) note that measurement of marital beliefs remains generally underdeveloped. Scholars should continue to further validate and develop the measures used in this study and other means of assessing marital beliefs. Results are also situated within the cultural context of the United States and results may be different in other international samples.

It should also be noted that although we tested to see if marital beliefs predicted changes in emerging adult behavior, such results do not preclude the possibility that reciprocal relationships exist. Emerging adult engagement in behaviors such as sexual activity may likewise shift marital paradigms. Preliminary analyses within the current data set suggest this may be the case and scholars have yet to develop theoretical explanations for such pathways or tested them. Given the associations found in this study, exploring reciprocal relationships across multiple time points should be a high priority among scholars interested in the interplay between behaviors and relational beliefs.

Despite such limitations, results of this study suggest many important future directions for scholars interested in understanding the intersection between marital beliefs and behavioral or relational trajectories during emerging adulthood. Marital beliefs appear to be fluid constructs that shift and change based on the experiences of individuals. Understanding the correlates, predictors, and outcomes associated with these changes continues to be an important priority for developmental and family scholars.

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

### References

- Blakemore, J. E. O., Lawton, C. A., & Vartanian, L. R. (2005). I can't wait to get married: Gender differences in drive to marry. *Sex Roles, 53*, 327–335.
- Blumer, H. (1979). *Symbolic interactionism: Perspective and method*. Berkeley: University of California Press.
- Carroll, J. S., Badger, S., Willoughby, B. J., Nelson, L. J., Madsen, S. D., & Barry, C. M. (2009). Ready or not? Criteria for marriage readiness among emerging adults. *Journal of Adolescent Research, 24*, 349–375.
- Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., Barry, C., & Madsen, S. D. (2008). Generation XXX: Pornography

AQ3

AQ4

- acceptance and use among emerging adults. *Journal of Adolescent Research*, 23, 6–30.
- Carroll, J. S., Willoughby, B., Badger, S., Nelson, L. J., Barry, C. M., & Madsen, S. D. (2007). So close, yet so far away: The impact of varying marital horizons on emerging adulthood. *Journal of Adolescent Research*, 22, 219–247.
- Clarkberg, M., Stolzenberg, R. M., & Waite, L. J. (1995). Attitudes, values, and entrance into cohabitational versus marital unions. *Social Forces*, 74, 609–632.
- Claxton, S. E., & van Dulmen, M. H. M. (2013). Casual sexual relationships and experiences in emerging adulthood. *Emerging Adulthood*, 1, 138–150.
- Copen, C. E., Daniels, K., Vespa, J., & Mosher, W. (2012). *First marriages in the United States: Data from the 2006–2010 National Survey of Family Growth*. National Health Statistics Reports (49). National Center for Health Statistics, Hyattsville, MD.
- Crissey, S. R. (2005). Race/ethnic differences in the marital expectations of adolescents: The role of romantic relationships. *Journal of Marriage and Family*, 67, 697–709.
- Cunningham, M., & Thornton, A. (2006). The influence of parents' marital quality on adult children's attitudes toward marriage and its alternatives: Main and moderating effects. *Demography*, 43, 659–672.
- Dollahite, D. C., Hawkins, A. J., & Parr, M. R. (2012). "Something more": The meanings of marriage for religious couples in America. *Marriage & Family Review*, 48, 339–362.
- Gibson-Davis, C. M., Edin, K., & McLanahan, S. (2005). High hopes but even higher expectations: The retreat from marriage among low-income couples. *Journal of Marriage and Family*, 67, 1301–1312.
- Hall, S. S. (2006). Marital meaning: Exploring young adults' belief systems about marriage. *Journal of Family Issues*, 27, 1437–1458.
- Kaestle, E., & Halpern, C. T. (2007). Sexual behavior of opposite-sex couples through emerging adulthood. *Perspectives on Sexual and Reproductive Health*, 39, 134–140.
- Kerpelman, J. L., & Schvaneveldt, P. L. (1999). Young adults' anticipated identity importance of career, marital, and parental roles: Comparisons of men and women with different role balance orientations. *Sex Roles*, 41, 189–217.
- ~~Kreider, R. M., & Ellis, R. (2011). *Number, timing, and duration of marriages and divorces, 2009*. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.~~
- Lanz, M., & Tagliabue, S. (2007). Do I really need someone in order to become an adult? Romantic relationships during emerging adulthood in Italy. *Journal of Adolescent Research*, 22, 531–549.
- Mahay, J., & Lewin, A. C. (2007). Age and the desire to marry. *Journal of Family Issues*, 28, 706–723.
- Meggiolaro, S. (2010). The importance of sexuality in the outcomes of a dating partnership among young adults. *Advances in Life Course Research*, 15, 41–52.
- Montgomery, M. J. (2005). Psychosocial intimacy and identity: From early adolescence to emerging adulthood. *Journal of Adolescent Research*, 20, 346–374.
- Nelson, L. J., & Barry, C. M. (2005). Distinguishing features of emerging adulthood the role of self-classification as an adult. *Journal of Adolescent Research*, 20, 242–262.
- Plotnick, R. D. (2007). Adolescent expectations and desires about marriage and parenthood. *Journal of Adolescence*, 30, 943–963.
- Rhoades, G. K., Kamp Dush, C. M., Atkins, D. C., Stanley, S. M., & Markman, H. J. (2011). Breaking up is hard to do: The impact of unmarried relationship dissolution on mental health and life satisfaction. *Journal of Family Psychology*, 25, 366.
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2006). Pre-engagement cohabitation and gender asymmetry in marital commitment. *Journal of Family Psychology*, 20, 553–560.
- Sassler, S., & Schoen, R. (1999). The effect of attitudes and economic activity on marriage. *Journal of Marriage and the Family*, 61, 147–159.
- Shulman, S., & Connolly, J. (2013). The challenge of romantic relationships in emerging adulthood reconceptualization of the field. *Emerging Adulthood*, 1, 27–39.
- Thornton, A., & Young-DeMarco, L. (2001). Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s. *Journal of Marriage and Family*, 63, 1009–1037.
- Whitehead, B. D., & Popenoe, D. (2001). Who wants to marry a soul mate? *The State of Our Unions*, 6–16. Retrieved from <http://www.stateofourunions.org/pdfs/SOOU2001.pdf>
- Willoughby, B. J. (2010). Marital attitude trajectories across adolescence. *Journal of Youth and Adolescence*, 39, 1305–1317.
- Willoughby, B. J. (2014). Using marital attitudes in late adolescence to predict later union transitions. *Youth & Society*, 46, 425–440.
- Willoughby, B. J., & Carroll, J. S. (2010). Sexual experience and couple formation attitudes among emerging adults. *Journal of Adult Development*, 17, 1–11.
- Willoughby, B. J., & Dworkin, J. (2009). The relationships between emerging adults' expressed desire to marry and frequency of participation in risk-taking behaviors. *Youth & Society*, 40, 426–450.
- Willoughby, B. J., Hall, S. S., & Luczak, H. P. (2013). Marital paradigms: A conceptual framework for marital attitudes, values, and beliefs. *Journal of Family Issues*. Advanced online publication. Retrieved from <http://jfi.sagepub.com/content/early/2013/05/08/0192513X13487677.abstract>

Author Biographic 

AQ5

AQ6