

Relational Contexts of Women's Stress and Competence  
During the Transition to Adulthood

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Haydon, K.C. (2015). Relational contexts of women's stress and competence during the transition to adulthood. *Journal of Adult Development*, 22, 112-123.  
doi: 10.1007/s10804-014-9205-y

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KEY WORDS: Close relationships; Stress; Competence; Emerging adulthood

### Abstract

To better understand developmental contexts of mixed affect generated by the transition to adulthood, this study examined relational correlates of self-reported stress and competence regarding the transition to adulthood. A sample of 223 college women reported on perceptions of parents, friends, and peers, as well as stress about taking on adult responsibilities (transition stress) and perceived competence regarding progress toward becoming an adult (transition competence). Results indicated distinctive relational correlates for transition stress versus competence. Transition stress was associated positively with over-involved parenting, parental attachment anxiety, and feeling behind peers in becoming an adult but not friendship quality, whereas transition competence was associated positively with friendship quality and feeling ahead of peers in becoming an adult but not parenting measures. Analyses controlled for internalizing distress, age, ethnicity, and family income. Results highlight the distinctive provisions afforded by close relationships for two key aspects of psychological experience during the process of becoming an adult.

### Relational Contexts of Women's Stress and Competence During the Transition to Adulthood

The transition to adulthood is often a time of mixed and intense affect accompanied by stress and uncertainty (Macmillan, 2006; Nelson & Padilla-Walker, 2013). Scholars have noted emerging adults' optimism and contentment but have also debated whether they are normatively miserable (Arnett, 2007; Twenge, 2006). A major source of mixed affect in emerging adulthood is the sudden drop in institutional structure that accompanies the transition to adulthood (Mortimer, 2003; Schulenberg, Sameroff, & Cicchetti, 2004; Schulenberg & Zarret, 2006). The relative lack of externally imposed structure can create new opportunities for self-direction that are associated with increased well-being but can also contribute to a sense of floundering (Mortimer, 2003; Schulenberg et al., 2004). For college students in particular, who will enjoy a few more years embedded in the institutional structures afforded by college environments, approaching this "structural cliff" may amplify existing vulnerabilities and uncertainty about whether they are prepared to face the challenges of being self-directed adults in comparatively less structured environments. To reconcile why many young people experience the transition to adulthood as "positive and laden with opportunity" but also "filled with uncertainty and adversity," Macmillan (2006, p. 17) advocated for integrating research on role transitions (e.g., moving from school to the workforce; marriage) with research on subjective psychological experience and how individuals evaluate their own psychological status as adults. Building on this proposal, the current study examined college women's subjective experiences of stress and competence regarding readiness for adulthood and the relational contexts in which these occur.

### **Transition Stress and Competence**

Research on emerging adulthood has successfully documented how young people conceptualize what it means to be an adult (e.g., Arnett, 1998; Mayseless & Scharf, 2003; Nelson

et al., 2007), factors associated with changes in identity status (see Schwartz, Zamboanga, Luyckx, Meca, & Ritchie, 2013 for a review), and variation in how and when young people pursue and take on adult roles (e.g., Cohen et al., 2003; Vuolo, Staff, & Mortimer, 2012). Others have examined trajectories of internalizing distress and well-being, documenting declines in the former and increases in the latter across emerging adulthood (Galambos, Varker, & Krahn, 2006; Schulenberg, Bryant, & O'Malley, 2004; Schulenberg & Zarret, 2006). More recently, researchers have investigated why some emerging adults seem to flourish while others flounder, defined in terms of religious faith, prosocial behavior, internalizing distress, and several types of risk behavior (Nelson & Padilla Walker, 2013).

Relatively less is known about the origin, correlates, and functional significance of young people's subjective experiences of their own readiness for adulthood. Work on readiness for adulthood has focused on the timing of role transitions such as leaving home (Seiffge-Krenke, 2013) and entry into marriage (Carroll et al., 2007, 2009). A small body of work has examined young people's subjective views, as opposed to objective criteria, of what characterizes emerging adulthood (e.g., "time of feeling adult in some ways but not in others," Lisha et al., 2012, p. 10; Reifman, Arnett, & Colwell, 2007) or of their own adult status (Lowe et al., 2012; Padilla-Walker, Nelson, & Carroll, 2012). However, these constructs may be distinct from distress that arises from doubt or uncertainty about progress toward adulthood (referred to here as *transition stress*) or a subjective sense of how one's strengths and capacities stack up against the challenges of emerging adulthood (referred to here as *transition competence*).

Thus, while research has generated considerable knowledge of how young people view emerging adulthood, a gap in the literature exists in terms of how young people evaluate themselves in relation to it. The extent to which young people view themselves as capable of

competently making progress toward taking on adult roles, and whether they are overwhelmed at the thought of doing so, likely affects how they handle the process of becoming an adult (i.e., whether they flounder or flourish). For young people just beginning the transition to adulthood, transition stress and competence may be key indicators of developmental adaptation during emerging adulthood and may direct the developmental course toward later outcomes. The current study is a first step toward examining young people's subjective sense of readiness to meet the looming challenges of adulthood.

### **Social Contexts of Transition Stress and Competence**

Close relationships with parents and friends are likely closely tied to young people's self-evaluations of stress and competence regarding the transition to adulthood. In addition to providing context within developmental periods, these relationships also calibrate salient psychosocial resources during transitions between developmental periods (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997; Dishion, Nelson, & Bullock, 2004). The mechanisms through which these relationships affect developmental transitions are the relatively distinctive developmental provisions they afford—and sometimes, the risks they confer—that change in accordance with age-appropriate developmental tasks (Collins, 2003). Thus, close relationships are likely significant developmental contexts from which individual differences in the transition to adulthood may emerge.

**Parents.** During the transition to adulthood, attachment to parents may support or undermine psychological exploration of adult roles (Scharf et al., 2004). Broadly speaking, attachment security is an asset in this context. Emerging adults who benefit from attachment security effectively regulate negative emotion, carry working models of self as competent, and experience self-efficacy during the transition to adulthood (Allen & Miga, 2010; Grossmann,

Grossmann, & Zimmermann, 1999). By contrast, dismissing states of mind and self-reported avoidance have been associated with downplaying the impact of negative events and minimizing reports of distress (Kobak & Sceery, 1988; Mikulincer, Shaver, & Pereg, 2003). Kobak & Sceery (1988) also reported, however, that late adolescents with dismissing attachment representations did not differ from those with secure-autonomous representations on self-reported competence. Dismissing representations were also unrelated to adjustment during the transition to college (Bernier, Larose, Boivin, & Soucy, 2004). Preoccupied attachment, on the other hand, is associated with distress and poor adjustment during the transition to college (Bernier et al., 2004; Larose & Bernier, 2001). Attachment anxiety, but not attachment avoidance, may also amplify young people's ambivalence about whether they are ready or competent enough to take on independent adult responsibilities.

Parental involvement may also correspond to subjective experiences of stress and competence during the transition to adulthood. Parental monitoring and involvement normatively recede in late adolescence (Masche, 2010), but recent years have seen a trend toward some parents remaining more heavily involved in their adolescents' lives for longer than in previous years (Fingerman et al., 2012). The impact of such involvement, however, appears to be mixed. At extremes, "helicopter parenting" (e.g., when parents intervene directly in roommate disputes, contact professors about grades, and prevent or intrude on their children's opportunities to resolve problems themselves) has been negatively associated with school engagement and parent-child communication, positively associated with children's entitlement, but unrelated to identity achievement, achievement of criteria for adulthood, and overall adjustment (Padilla-Walker & Nelson, 2012; Segrin, Givertz, Swiatkowski, & Montgomery, 2012). At more moderate levels, some parents may implicitly prolong children's reliance on them by continuing

to perform instrumental tasks (e.g., laundry and running errands) or orchestrating children's emotional or professional lives from the sidelines (e.g., managing decisions about social relationships or career interests). Though well intentioned, and perhaps less overtly intrusive than helicopter parenting, such over-involvement has the potential to negatively impact young people both psychologically and behaviorally; nonetheless, whether parental over-involvement undermines young people's sense of readiness for adulthood remains understudied.

**Friendships.** Although high quality friendships are well-established as developmental assets, particularly in adolescence (e.g., Hartup & Stevens, 1997, Rubin et al., 2004, Sherman, Lansford, & Volling, 2006), their role in emerging adulthood seems somewhat less straightforward. For example, Barry, Madsen, Nelson, Carroll, and Badger (2009) reported that friendship quality was not associated with identity status in emerging adulthood and was negatively associated with achievement of adulthood criteria. The authors suggested that friendships provide important scaffolding for reaching adult criteria but may become less useful once those criteria have been reached. Building on this proposal, friendships may be a salient source of support in the early years of emerging adulthood as young people approach the looming challenges of taking up adult roles and may be associated with subjective experiences of stress and competence.

**Comparison to Peers.** Particularly in adolescence, peers serve as reference points for measuring one's developmental progress. Perception of pubertal timing and subjective age relative to others affects mental health and well-being for adolescents developing both earlier and later than peers (Benson & Elder, 2011; Conley & Rudolph, 2009; Ge, Conger, & Elder, 1996). Peer groups may serve a similar function for how emerging adults evaluate their relative progress toward adulthood. The perception that one is behind peers in the transition to adulthood

may coincide with stress, whereas feeling ahead of peers may be associated with subjective feelings of competence.

**Gender.** Shifts over the past several decades in the order and timing of role transitions for women (e.g., delayed entry into marriage, parenthood, the workforce, and financial independence; Cohen et al. 2003; Shanahan, 2000) suggest that men's and women's experience of structural transitions in emerging adulthood may be converging. Nelson and Padilla-Walker (2013), however, noted the growing evidence that there may be "two significantly different emerging adulthoods in America's college students—one for males and one for females" (p. 76). In their study, college women tended to flourish while college men tended to flounder in terms of prosocial behavior, religious faith and values, self-worth, and risky behaviors; women, however, also reported more anxiety than did men. Despite flourishing more (or possibly earlier) than men, women also experience particularly gendered forms of stress during the college years (Schrick Sharp, Zvonkovic, & Reifman, 2012) and have friendships characterized by greater support and intimacy than men's friendships (Barry et al., 2009). In addition to exploring apparent gender differences in the experience of stress, more research is needed to examine within-gender variation regarding the transition to adulthood, and in particular the positive and negative internal experiences that accompany this transition.

### **The Current Study**

This study addressed three emerging areas in research on the transition to adulthood: 1) the relative lack of research on subjective psychological experience of the transition to adulthood; 2) the shifting roles of close relationships with parents and friends; and 3) variation in women's experiences of distress during the transition to adulthood. The current study investigated college women's reports of transition stress (stress associated with feeling

unprepared to take on adult roles and responsibilities) and transition competence (positive evaluations of one's progress toward adult roles and responsibilities) as well as their perceptions of relationships with parents and friends and comparisons to peers in advance of the drop in structural support that accompanies the transition out of college (Schulenberg & Zarret, 2006).

This study examined two principal hypotheses based on prior research and theory. First, transition stress should be associated with parental attachment anxiety (but not avoidance), over-involved parenting, low friendship quality, and feeling behind peers in the transition to adulthood, controlling for age, family income, ethnicity, and internalizing symptoms. Second, transition competence regarding progress toward adulthood should be associated with low parental attachment anxiety (but not avoidance), low over-involved parenting, higher friendship quality, and feeling ahead of peers, controlling for age, income, ethnicity, and internalizing symptoms.

Three moderation hypotheses were also examined. In light of prior evidence that preoccupied attachment moderated the association between parental psychological control and adjustment to college (Bernier et al., 2004), this study examined whether parental attachment anxiety would exacerbate the negative effects of over-involved parenting on transition stress. Prior research also indicates that friendships can buffer the effects of negative parenting on adjustment to college (Larose & Bernier, 2001) and that friendship quality may be especially salient for women but may also become less salient across the transition to adulthood (Barry et al., 2009). Thus, analyses examined whether friendship quality would buffer the negative effects of attachment anxiety and over-involved parenting on transition stress and whether the association of friendship quality and transition competence would vary by age.

## **Method**

## Participants

The full sample consisted of 246 female college students at a private women's college in the northeastern United States. Participants were drawn from all class years; mean age was 20.27 years ( $SD = 1.24$  years, range = 18 to 23.9 years). The sample represented diverse ethnic backgrounds: 10.2% identified their ethnic heritage as African, 29.3% as Asian or South Asian, 44.9% as European, 6.2% as Hispanic, Latina, or Spanish origin, 6.2% identified as multiethnic and 3.1% did not specify their ethnic background. The sample was diverse in other ways, including first-generation college students (15.1%), international students (28.4%), and transfer students (3.1%). Six participants of nontraditional college age (mean = 36.2 years, range = 26.5 to 48.7 years) were omitted from analyses due to their status as adults compared to traditional-aged college students.

## Procedure

Participants were recruited through the Psychology Department's research participation pool and from the general college population through fliers and advertisements posted to campus-wide distribution lists. Participants received a link to the online consent form and survey (hosted by [surveymonkey.com](https://www.surveymonkey.com)). At the end of the survey, participants were debriefed and opted to receive research participation credit or enter a raffle for a gift card.

## Measures

**Attachment Avoidance and Anxiety.** The Experiences in Close Relationships – Relationship Structures (ECR-RS, Fraley et al., 2011), a 9-item version of the ECR-R that measures relationship-specific scales of attachment avoidance and anxiety, assessed attachment avoidance and anxiety for mothers and fathers. For analysis, composite measures of parental

avoidance and anxiety were created by following the procedure described in Fraley et al. (2011, p. 619). Cronbach's alpha was .88 for parental avoidance and .86 for parental anxiety.

**Parental Over-involvement.** A new measure of parental over-involvement was developed for this study based on conversations with college students about ways in which parents participate in their lives. The goal was to assess the extent to which parents remained involved in their children's lives in areas where college students typically begin to function more independently. To minimize social desirability bias and to avoid colloquial connotations of helicopter parenting, items were worded neutrally. Five items assessed the extent to which participants relied on parents when making decisions about their social lives, handling problems that arise in daily life, and performing instrumental tasks such as laundry, paying bills, and running errands. Possible responses ranged from 1 (never or rarely) to 5 (almost always); items appear in Table 3. Two items also assessed the frequency of contact with each parent (by phone, text, email, online chat, and face-to-face contact, etc.); possible responses ranged from 1 (never or less than once a month) to 5 (multiple times a day). All items were assessed separately for mothers and fathers; Cronbach's alpha was .81.

**Friendship Quality.** The peer version of the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) assessed the quality of participants' closest friendships. Participants were instructed to respond using a 5-point scale (1 = *almost never or never true*, 5 = *almost always or always true*) to 25 items about their closest friendships. Items included: "My friends accept me as I am," "I can count on my friends when I need to get something off my chest," and "I wish I had different friends [reverse-scored]". Higher scores indicated higher quality friendships. Cronbach's alpha was .93.

**Comparison to Peers.** Two items assessed participants' sense of being "off-time" (i.e., either ahead or behind same-age peers) in the transition to adulthood. The items "Others my age are ahead of me in becoming an adult" and "I am ahead of others my age in becoming an adult" were rated on a five-point scale where 1 (*never*) and 5 (*always or almost always*).

**Transition Stress.** A new measure was developed to assess participants' stress related to their readiness for adulthood. Items were generated in conversations with college students about how they experience challenges related to the transition to adulthood. Nine initial items assessed the extent to which participants felt unprepared for taking on adult responsibilities and their general stress about the looming process of becoming adults. The scale was trimmed to seven items following factor analysis and scale reliability testing (see Table 1). Possible responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's alpha for the final scale was .90.

**Transition Competence.** A new measure was developed to assess transition competence. Conversations with college students suggested that students derive a sense of competence from progress in three relevant domains during the early part of the transition to adulthood: career/education, romantic relationships, and emotional self-management. Initially, 16 items assessed participants' sense of progress toward specific goals (e.g., maintaining a healthy romantic relationship, actively pursuing a career path, effectively managing emotional ups and downs) and their general sense of satisfaction with their progress toward becoming an adult. Possible responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The final scale was trimmed to 10 items following factor analysis and reliability testing (see Table 2). Cronbach's alpha for the final scale was .81.

**Internalizing Distress.** The 20-item Center for Epidemiologic Studies-Depression scale (CES-D; Radloff, 1977) assessed participants' internalizing distress. Cronbach's alpha was .91.

**Covariates.** Age, ethnicity, and family income served as covariates. Participants who self-reported only European heritage were coded 1; participants who self-reported non-European or multiethnic backgrounds were coded 0. Participants reported their family's average annual household income in U.S. dollars on a six-point scale (1 = \$0-24,999; 2 = \$25,000-\$49,000; 3 = \$50,000-99,999; 4 = \$100,000-149,000; 5 = 150,000-199,999; 6 = \$200,000 or higher).

### **Analytic Plan**

First, analyses evaluated the psychometric properties of the new parental over-involvement, transition stress, and transition competence measures. Items for each scale were submitted for reliability analysis (Tables 1, 2, and 3). Bivariate correlations and descriptive statistics for all variables appear in Table 4. Finally, hierarchical regression models tested hypotheses about relational correlates of transition stress and competence as well as proposed moderation effects (Table 5). All variables were standardized prior to analysis to aid comparison of relative effect sizes. Parental attachment avoidance, anxiety, and parental over-involvement were entered first, followed by a second block containing friendship quality and positive and negative comparison to peers, as predictors of transition stress and competence, respectively. Models controlled for internalizing distress, age, ethnicity, and family income. Because transition stress and competence were correlated ( $r = -.44, p < .001$ ), the model predicting one scale controlled for the other.

Given questions about how groups other than middle-class American students following a traditional college sequence experience emerging adulthood (Arnett & Tanner, 2010; Syed & Mitchell, 2013), analyses not reported here examined differences among international students,

first-generation college students, and students who had taken a “gap year” before matriculating to college compared to the rest of the sample. First-generation college students reported significantly higher attachment avoidance compared to other participants ( $t[221] = -2.00, p = .04$ ). Participants who had taken a gap year reported significantly less parental over-involvement ( $t[221] = 2.22, p = .03$ ) and reported feeling ahead of peers significantly more than others ( $t [221] = -2.12, p = .04$ ). No other significant differences emerged; results from analyses in which international, first-generation, and gap-year status were controlled did not differ from those reported here.

Missing data occurred for 17 participants, ranging from one to six missing variables within person; within variables, missingness ranged from 0.4% to 3.6%. Missing data were imputed using the MICE 2.17 package in R version 2.15.2. Analyses conducted on the original and imputed datasets resulted in identical patterns of effects at the level of beta coefficients,  $p$  values, and model effect sizes. Analyses reported below used non-imputed data from the subsample of participants with complete data ( $N = 223$ ).

## Results

### Psychometric Properties of New Measures

**Transition Stress and Competence.** A principal components analysis (PCA) of the initial nine items of the stress scale resulted in extraction of one factor (eigenvalue = 4.40, variance explained = 62.85%). Two items that did not load adequately were dropped from the scale; item factor loadings appear in Table 1. Cronbach’s alpha for the final scale was .90. The initial 16 items of the competence scale were also submitted for PCA with varimax rotation (Table 2). As expected based on the measure’s design to tap three competence domains, three factors emerged: emotional competence (eigenvalue = 4.90, variance explained = 35.0%),

career/education competence (eigenvalue = 1.93, variance explained = 13.82%), and romantic competence (eigenvalue = 1.45, variance explained = 10.34%). Because the focal construct was participants' global subjective sense of competence across domains, scores on the final 10 items were averaged to create a single scale; Cronbach's alpha was .81.

**Parental Over-involvement.** The 12 items in the over-involvement scale were submitted for PCA with varimax rotation (Table 3). Items clearly diverged into distinct factors assessing the maternal and paternal relationships: paternal over-involvement (eigenvalue = 3.95, variance explained = 32.93%) and maternal over-involvement (eigenvalue = 2.14, variance explained = 17.86%). Because there was no a priori prediction about differential associations of maternal vs. paternal over-involvement to relevant outcomes, scores on the 12 items were averaged to create one scale; Cronbach's alpha was .81. To rule out the possibility that items assessed behaviors perceived by participants as welcome parental support, analyses confirmed that the parental over-involvement scale was positively associated with participants' responses to two items: "I wish my parents would let me do things for myself" ( $r = .16, p = .02$ ) and "My parents are involved more than I would like" ( $r = .32, p < .001$ ).

### **Correlates of Stress Regarding the Transition to Adulthood**

A hierarchical linear regression tested the first hypothesis that attachment anxiety, parental over-involvement, friendship quality, and feeling behind peers in terms of becoming an adult would be associated with transition stress in the expected directions (Table 5). In step 1, parental avoidance ( $\beta = .27, p < .001$ ) and over-involvement ( $\beta = .36, p < .001$ ) were positively associated with transition stress, but attachment anxiety was not. In step 2, however, attachment avoidance was no longer significantly associated with transition stress, while attachment anxiety ( $\beta = .13, p = .04$ ) and overinvolvement ( $\beta = .18, p = .02$ ) were significantly associated with

stress. Feeling ahead ( $\beta = -.18, p < .001$ ) and behind peers ( $\beta = .46, p < .001$ ) in becoming an adult were also significantly associated with higher stress in the expected directions, but contrary to expectations friendship quality was not statistically significantly associated with transition stress ( $\beta = -.11, p = .05$ ). In step 3, all previously significant effects except feeling ahead of peers remained significant when covariates were entered into the model. Among covariates, only internalizing distress ( $\beta = .14, p = .02$ ) was significantly associated with transition stress; transition competence was also negatively related to transition stress ( $\beta = -.19, p < .001$ ). The overall model accounted for significant variance in transition stress ( $R^2 = .45, p < .001$ ) and each step resulted in a significant increase in  $R^2$ .

### **Correlates of Perceived Competence**

A second hierarchical regression tested the hypothesis that low attachment anxiety, low parental over-involvement, high friendship quality, and feeling ahead of peers would be associated with transition competence (Table 5). In step 1, attachment avoidance was significantly negatively associated with transition competence ( $\beta = -.24, p = .02$ ), but contrary to expectations, parental over-involvement and attachment anxiety were not. In step 2, as expected, higher friendship quality ( $\beta = .24, p < .001$ ) and feeling ahead ( $\beta = .44, p < .001$ ) and behind peers ( $\beta = -.15, p = .02$ ) were significantly associated with higher perceived competence; attachment avoidance was no longer significant. In step 3, these findings were robust to the inclusion of covariates; age ( $\beta = .15, p = .01$ ) and internalizing distress ( $\beta = -.18, p < .001$ ) were significantly associated with transition competence, but ethnicity and family income were not. Transition stress was negatively associated with competence ( $\beta = -.26, p < .001$ ). The overall model accounted for significant variance in transition competence ( $R^2 = .43, p < .001$ ) and each step resulted in a significant increase in  $R^2$ .

**Moderation Analyses.** Analyses also examined three moderation hypotheses: 1) that attachment anxiety would exacerbate the effect of parental overinvolvement on transition stress, 2) that friendship quality would buffer against the impact of negative parenting experiences on transition stress, and 3) that age would moderate the association between friendship quality and transition competence. A regression model including the interaction term (i.e., the product of the two standardized main effects) between attachment anxiety and parental over-involvement ( $\beta = -.03, p = .63$ ) did not support the first moderation hypothesis. Two models predicting transition stress, one of which included the interaction of friendship quality and attachment anxiety ( $\beta = .07, p = .21$ ) and one that included the interaction of friendship quality and parental over-involvement ( $\beta = -.07, p = .19$ ), failed to support the second hypothesis that friendship quality buffered the effects of negative parenting experiences. Finally, a regression model including the interaction term between friendship quality and age indicated that the effect of friendship quality on transition competence did not vary by age ( $\beta = .05, p = .32$ ).

### Discussion

To better understand developmental contexts of mixed affect generated by the transition to adulthood, this study assessed college women's self-evaluations of stress and competence during the transition to adulthood. Based on the premise that close relationships can augment or inhibit strengths and vulnerabilities that young people leverage to navigate developmental transitions, this study also examined relational contexts of transition stress and competence. Despite the expectation that relationships with parents and friends and comparison to peers would be associated with both transition stress and competence, findings suggested a more nuanced account in which distinctive relational correlates of transition stress and competence emerged. Parental over-involvement and attachment anxiety were associated with transition

stress but not competence, whereas friendship quality was associated with transition competence but not stress. Notably, perceptions of the self in comparison to same-age peers were associated with both transition stress and competence. Finally, moderation analyses were not significant, suggesting that each relational context contributed uniquely to these respective outcomes. Taken together, the current findings support the distinctive provisions of specific relationship contexts to women's subjective psychological experience of stress and competence during the process of becoming an adult.

**Transition stress.** Links between parenting measures and transition stress were consistent with the larger developmental claim that supportive, non-intrusive caregiver relationships provide the foundation for the development of constituent skills needed for self-regulation of distress (Collins & Sroufe, 1999). Transition stress was associated with self-reported attachment anxiety, but not avoidance, once covariates and other predictors were taken into account. The current findings, measured via self-report, converge with prior evidence gathered via the Adult Attachment Interview that attachment preoccupation, but not dismissing states of mind, is associated with distress during this period (Bernier et al., 2004; Larose & Bernier, 2001). Together, these findings indicate that concerns about the availability and supportiveness of caregivers appears to confer some risk for distress about the process of becoming an adult, whereas the discomfort with dependence on caregivers more characteristic of avoidant and dismissing attachment appears not to be associated with such distress.

Similarly, the link between parental over-involvement and transition stress builds on prior work highlighting the importance of parents' capacity to flexibly adjust support in accordance with their children's emerging autonomy (Padilla-Walker & Nelson, 2012; Segrin et al., 2012). Consistent with the notion that parental over-involvement may compromise rather than foster

children's capacity for autonomy, parental over-involvement was associated with feeling unprepared to take on adult roles. What constitutes developmentally appropriate support in one period (e.g., scaffolding children's entry into social relationships in early childhood) may constitute autonomy suppression in a subsequent period (e.g., directing college students' decisions about their social lives). In addition to limiting opportunities for young people to try out adult roles and behaviors in a scaffolded context and restricting practice at adulthood (Hastings et al., 2010), parental over-involvement may also contribute to underlying psychological beliefs (i.e., engendering doubt that the young person is ready for independence) that undermine a sense of readiness for leading a self-directed adult life. Furthermore, this link is likely bidirectional: parents who perceive their children's distress about taking on adult responsibilities may become over-involved to mitigate their children's distress. Longitudinal research is needed to determine the direction, reciprocity, and functional significance of such effects.

Negative comparison to peers also emerged as a significant correlate of transition stress, highlighting the psychological importance of social referencing for perceptions of progress toward adulthood. In addition to stress associated with feeling behind peers in becoming an adult, negative comparison to peers may also have salient practical implications for women coming of age in an economic climate in which there is open competition between peers and friends for limited academic and career-related opportunities. Contrary to expectations, friendship quality was only weakly associated with transition stress, suggesting that low friendship quality is not a clear risk factor for feeling unprepared for adulthood. This finding may reflect somewhat restricted variability in friendship quality in this sample, which reported fairly high quality friendships on average. Another possibility is that some degree of transition stress is

normative even among those with supportive friendships. In other words, normative stress about becoming an adult may be unmitigated by having supportive friends who are also experiencing transition stress. In any case, these results build on prior work about lesser role of friendship quality relative to other close relationships and social contexts in emerging adulthood (Barry et al., 2009).

**Transition competence.** Distinctive relational correlates of transition competence also emerged. Though attachment avoidance was initially negatively associated with transition competence, none of the parenting measures were associated with transition competence once friendship quality and comparison to peers were taken into account. Thus, despite evidence of links between aspects of parenting and various aspects of emerging adulthood (e.g., Barry, Padilla-Walker, Madsen, & Nelson, 2008; Padilla-Walker & Nelson, 2013; Segrin et al., 2012), this study found no link between parenting measures and the subjective experience of competence regarding the process of becoming an adult. These findings contribute to the growing literature on the mixed role of parents during this developmental period by providing new evidence that parents affect their children's launch into adulthood in multifaceted ways.

By contrast, and as expected, positive comparison to peers was robustly associated with women's transition competence. Friendship quality also emerged as a significant correlate of transition competence, a result that stands in some contrast to Barry et al.'s (2009) finding that friendship quality was unrelated to identity achievement and negatively associated with reaching criteria for adulthood. Perhaps friendship quality, particularly for women, is positively associated with subjective experience but negatively associated with objective criteria regarding the transition to adulthood. Another possibility is that the link between friendship quality and perceived competence is bidirectional and reflects larger social transitions associated with

emerging adulthood. The transition from high school to college is an opportunity to restructure social networks and establish new friendships (Parker et al., 2012); perceived competence may promote establishment and maintenance of higher quality friendships, which in turn may help sustain self-perceptions of competence. Future research should examine possible mediating pathways among friendship quality, transition competence, and achievement of subsequent outcomes in emerging adulthood.

### **Functional Implications of Transition Stress and Competence**

Transition stress and competence, as measured in the current study, emerged as distinct constructs with distinct correlates rather than bipolar indicators of the same underlying dimension. That said, in this sample they were not orthogonal, which suggests that they may be functionally related. Schulenberg, Sameroff, and Cicchetti (2004) noted that depression during the transition to adulthood can motivate self-examination and change. Similarly, transition stress may serve as an impetus for mobilizing engagement of new challenges as opposed to the avoidance of life tasks associated with “floundering” (Mortimer, 2003). Whereas high transition stress in the context of low competence may derail progress toward the transition to adulthood, moderate stress in the context of moderate to high competence may generate adaptation in response to challenges to developmental systems. Thus, transition stress on its own may not indicate maladaptation or maladjustment. Investigating whether transition stress and competence serve interdependent or distinctive functions in terms of how they impact developmental trajectories through emerging adulthood is an important direction for future longitudinal research.

### **Caveats**

The current study was limited by its single-reporter, single-method design. Although the main focus of this study concerns how emerging adults perceive themselves and their relationship systems, future research would benefit from assessment via multiple methods and through the lenses of multiple reporters. A second limitation is concurrent measurement, which precludes establishment of the direction of effects. Longitudinal research is needed to disentangle these issues and test mediation and moderation processes that unfold over time that were beyond the scope of the current study. Finally, all participants in this sample identified as women; whether or not the same links between transition stress, competence, and relationships would be observed among men requires additional research.

### **Conclusion**

One of the paradoxes of development is that the capacity for self-organization emerges from relational contexts. During a developmental transition in which external structures recede and young people are challenged to self-direct in new ways, strengths and vulnerabilities shaped by experiences in close relationships come to the fore. Understanding the system of close relationships in which the process of becoming an adult is embedded, including how relationships serve as sources of strength and vulnerability, may ultimately point to mechanisms that foster adaptive versus maladaptive functioning during and after the transition to adulthood. Likewise, research that examines in more depth the extent to which subjective experiences of the *process* of becoming an adult converge (or diverge) from objective indicators of adult *status* (such as timing of role transitions) would greatly enrich understanding of developmental change during emerging adulthood.

### References

- Allen, J. P., & Miga, E. M. (2010). Attachment in adolescence: A move to the level of emotion regulation. *Journal of Social and Personal Relationships, 27*, 181-190.
- Armsden, G.C., & Greenberg, M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*, 427-454.
- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development, 41*, 295-315.
- Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child and Adolescent Development, 100*, 63-76.
- Arnett, J.J. (2007). Suffering, selfish, slackers? Myths and reality about emerging adults. *Journal of Youth and Adolescence, 36*, 23-29.
- Arnett, J.J., & Tanner, J.L. (2010). Themes and variations in emerging adulthood across social classes. In J.J. Arnett et al. (Eds.), *Debating Emerging Adulthood: Stage or Process?*, pp. 31-52. New York: Oxford University Press.
- Barry, C. M., Madsen, S. D., Nelson, L. J., Carroll, J. S., & Badger, S. (2009). Friendship and romantic relationship qualities in emerging adulthood: Differential associations with identity development and achieved adulthood criteria. *Journal of Adult Development, 16*, 209-222.
- Barry, C. M., Padilla-Walker, L. M., Madsen, S. D., & Nelson, L. J. (2008). The impact of maternal relationship quality on emerging adults' prosocial tendencies: Indirect effects via regulation of prosocial values. *Journal of Youth and Adolescence, 37*, 581-591.

- Benson, J.E., & Elder, G.H. (2011). Young adult identities and their pathways: A developmental and life course model. *Developmental Psychology, 47*, 1646-1657.
- Bernier, A., Larose, S., Boivin, M., & Soucy, N. (2004). Attachment state of mind: Implications for adjustment to college. *Journal of Adolescent Research, 19*, 783-806.
- 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.
- 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.
- Cohen, P., Kasen, S., Chen, H., Hartmark, C., & Gordon, K. (2003). Variations in patterns of developmental transmissions in the emerging adulthood period. *Developmental Psychology, 39*, 657-669.
- Collins, W.A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence, 13*, 1-24.
- Collins, W.A., Laursen, B., Mortensen, N., Luebker, C., & Ferreira, M. (1997). Conflict processes and transitions in parent and peer relationships: Implications for autonomy and regulation. *Journal of Adolescent Research, 12*, 178-198.
- Collins, W.A. & Sroufe, L.A. (1999). Capacity for intimate relationships: A developmental construction. In W. Furman, B.B. Brown, & C. Feiring (Eds.), *The Development of Romantic Relationships in Adolescence* (pp. 125-147). New York: Cambridge University Press.
- Conley, C.S., & Rudolph, K D. (2009). The emerging sex difference in adolescent depression: Interacting contributions of puberty and peer stress. *Development and*

- Psychopathology*, 21, 593-620.
- Dishion, T.J., Nelson, S.E., & Bullock, B.M. (2004). Premature adolescent autonomy: Parent disengagement and deviant peer process in the amplification of problem behaviour. *Journal of Adolescence*, 27, 515-530.
- Fingerman, K.L., Cheng, Y.P., Tighe, L., Birditt, K.S., & Zarit, S. (2012). Relationships between young adults and their parents. In A. Booth et al. (Eds.), *Early Adulthood in a Family Context* (pp. 59-85). New York: Springer.
- Fraley, R.C., Heffernan, M.E., Vicary, A.M., & Brumbaugh, C.C. (2011). The experiences in close relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23, 615-625.
- Galambos, N. L., Barker, E. T., & Krahn, H. J. (2006). Depression, self-esteem, and anger in emerging adulthood: seven-year trajectories. *Developmental Psychology*, 42, 350-365.
- Ge, X., Conger, R. D., & Elder Jr., G. H. (2001). Pubertal transition, stressful life events, and the emergence of gender differences in adolescent depressive symptoms. *Developmental Psychology*, 37, 404-417.
- Grossmann, K.E., Grossmann, K., & Zimmermann, P. (1999). A wider view of attachment and exploration: Stability and change during the years of immaturity. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of Attachment: Theory, Research, and Clinical Applications* (pp. 760-786). New York: Guilford Press.
- Hartup, W.W. & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin*, 121, 355–370.
- Hastings, P. D., Nuselovici, J. N., Rubin, K. H., & Cheah, C. S. (2010). Shyness, parenting, and

- parent-child relationships. In K.H. Rubin & R.J. Coplan (Eds.) *The Development of Shyness and Social Withdrawal* (pp. 107-130). New York: Guilford Press.
- Kobak, R.R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development, 58*, 135-146.
- Larose, S., & Bernier, A. (2001). Social support processes: Mediators of attachment state of mind and adjustment in late adolescence. *Attachment & Human Development, 3*, 96-120.
- Lisha, N. E., Grana, R., Sun, P., Rohrbach, L., Spruijt-Metz, D., Reifman, A., & Sussman, S. (2012). Evaluation of the psychometric properties of the Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) in a sample of continuation high school students. *Evaluation & the Health Professions, 37*, 1-23.
- Lowe, S. R., Dillon, C. O., Rhodes, J. E., & Zwiebach, L. (2013). Defining adult experiences perspectives of a diverse sample of young adults. *Journal of Adolescent Research, 28*, 31-68.
- Macmillan, R. (2006). 'Constructing adulthood': Agency and subjectivity in the transition to adulthood. *Advances in Life Course Research, 11*, 3-29.
- Masche, J.G. (2010). Explanation of normative declines in parents' knowledge about their adolescent children. *Journal of Adolescence, 33*, 271-284.
- Mayseless, O., & Scharf, M. (2003). What does it mean to be an adult? The Israeli experience. *New Directions for Child and Adolescent Development, 100*, 5-20.
- Mikulincer, M., Shaver, P.R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*, 77-102.
- Mortimer, J.T. (2003). *Working and Growing Up in America*. Harvard University Press.

- Nelson, L.J., & Padilla-Walker, L.M. (2013). Flourishing and floundering in emerging adult college students. *Emerging Adulthood, 1*, 67-78.
- Nelson, L. J., Padilla-Walker, L. M., Carroll, J. S., Madsen, S. D., Barry, C. M., & Badger, S. (2007). "If you want me to treat you like an adult, start acting like one!" Comparing the criteria that emerging adults and their parents have for adulthood. *Journal of Family Psychology, 21*, 665-674.
- Padilla-Walker, L.M., & Nelson, L.J. (2012). Black hawk down?: Establishing helicopter parenting as a distinct construct from other forms of parental control during emerging adulthood. *Journal of Adolescence, 35*, 1177-1190.
- Padilla-Walker, L. M., Nelson, L. J., & Carroll, J. S. (2012). Affording emerging adulthood: parental financial assistance of their college-aged children. *Journal of Adult Development, 19*, 50-58.
- Parker, P.D., Lüdtke, O., Trautwein, U., & Roberts, B. W. (2012). Personality and relationship quality during the transition from high school to early adulthood. *Journal of Personality, 80*, 1061-1089.
- Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Reifman, A., Arnett, J. J., & Colwell, M. J. (2007). Emerging adulthood: Theory, assessment, and application. *Journal of Youth Development, 2*, 1-12.
- Rubin, K. H., Dwyer, K. M., Booth-LaForce, C., Kim, A. H., Burgess, K. B., & Rose-Krasnor, L. (2004). Attachment, friendship, and psychosocial functioning in early adolescence. *The Journal of Early Adolescence, 24*, 326-356.

- Scharf, M., Mayseless, O., & Kivenson-Baron, I. (2004). Adolescents' attachment representations and developmental tasks in emerging adulthood. *Developmental Psychology, 40*, 430-444.
- Schulenberg, J. E., Bryant, A. L., & O'Malley, P. M. (2004). Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and Psychopathology, 16*, 1119-1140.
- Schulenberg, J. E., Sameroff, A. J., & Cicchetti, D. (2004). The transition to adulthood as a critical juncture in the course of psychopathology and mental health. *Development and Psychopathology, 16*, 799-806.
- Schulenberg, J.E. & Zarrett, N.R. (2006). Mental health during emerging adulthood: Continuity and discontinuity in courses, causes, and functions. In J.J. Arnett & J.L. Tanner (Eds.), *Emerging Adults in America: Coming of Age in the 21st Century* (pp. 135-172). Washington, DC: American Psychological Association.
- Schwartz, S. J., Zamboanga, B. L., Luyckx, K., Meca, A., & Ritchie, R. A. (2013). Identity in emerging adulthood reviewing the field and looking forward. *Emerging Adulthood, 1*, 96-113.
- Segrin, C., Givertz, M., Swiatkowski, P., & Montgomery, N. (2013). Overparenting is associated with child problems and a critical family environment. *Journal of Child and Family Studies, 22*, 1-10.
- Sherman, A. M., Lansford, J. E., & Volling, B. L. (2006). Sibling relationships and best friendships in young adulthood: Warmth, conflict, and well-being. *Personal Relationships, 13*, 151-165.

- Seiffge-Krenke, I. (2013). "She's leaving home..." Antecedents, consequences, and cultural patterns in the leaving home process. *Emerging Adulthood, 1*, 114-124.
- Schrick, B. H., Sharp, E. A., Zvonkovic, A., & Reifman, A. (2012). Never let them see you sweat: Silencing and striving to appear perfect among US college women. *Sex Roles, 67*, 591-604.
- Shanahan, M. J. (2000). Pathways to adulthood in changing societies: Variability and mechanisms in life course perspective. *Annual Review of Sociology, 26*, 667-692.
- Syed, M., & Mitchell, L.L. (2013). Race, ethnicity, and emerging adulthood: Retrospect and prospects. *Emerging Adulthood, 1*, 83-95.
- Twenge, J.M. (2006). *Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled--and More Miserable Than Ever Before*. New York: Simon and Schuster.
- Vuolo, M., Staff, J., & Mortimer, J. T. (2012). Weathering the great recession: Psychological and behavioral trajectories in the transition from school to work. *Developmental Psychology, 48*, 1759-1773.

Table 1

*Principal Components Analysis Results for Transition Stress*

Items	Factor loading
I don't feel ready to be a "grown-up."	<b>.85</b>
I feel unprepared for life after college.	<b>.85</b>
I am not as far along on becoming an adult as I should be.	<b>.84</b>
I worry that I should be acting more adult than I am.	<b>.82</b>
I feel stressed about taking on adult responsibilities.	<b>.77</b>
I have more adult responsibilities than I am ready for.	<b>.74</b>
The process of becoming an adult is stressful.	<b>.64</b>
I feel ready to take on adult responsibilities. (R)	.54
I have more adult responsibilities than I should for my age.	.30

*Note.*  $N = 223$ . Total variance explained = 52.4%; (R) indicates reverse-scoring.

Items with bolded factor loadings were retained for the final scale. Cronbach's alpha was .90.

Table 2

*Principal Components Analysis Results for Transition Competence*

Items	Factor Loadings		
	1	2	3
I am good at managing my emotional ups and downs.	<b>.72</b>	.07	.23
I am confident in making my own decisions about my life.	<b>.72</b>	.20	.17
In terms of my emotional life, I feel like an adult.	<b>.66</b>	.09	.35
I am satisfied with my progress toward becoming an adult.	<b>.65</b>	.24	.02
I know what direction I want to take in my career.	.08	<b>.85</b>	.07
I am actively pursuing a career path.	-.00	<b>.85</b>	-.03
In terms of my career goals, I feel like an adult.	.26	<b>.75</b>	.19
I am able to maintain a healthy and satisfying romantic relationship.	.09	.11	<b>.86</b>
I know how to choose the right romantic partner for me.	.14	.05	<b>.87</b>
In terms of my romantic relationships or dating life, I feel like an adult.	.17	.12	<b>.78</b>
I rely too much on my parents for guidance or help in making decisions. (R)	.56	.04	.07
I feel ready to take on adult responsibilities.	.52	.11	-.10
I know who I am and what's important to me in life.	.51	.34	.23
I have the resources I need to become the person I want to be.	.47	.33	.25
In terms of my education, I feel like an adult.	.36	.56	.21
I am actively pursuing my educational goals.	.30	.54	.04

*Note.*  $N = 223$ . (R) indicates reverse-scoring. Total variance explained = 55.2%. Items with

bolded factor loadings were retained for the final scale. Cronbach's alpha was .81.

Table 3

*Principal Components Analysis Results for Parental Over-Involvement*

Items	Factor Loading	
	1	2
When I need something, my father takes care of it for me.	.79	.07
My father checks up on me to see if I need anything.	.77	.07
How often do you have contact with your father?	.75	.16
When I have a problem in my life, I wait to act on it until I talk to my father.	.74	.13
My father helps me with decisions about my social life.	.68	.18
My father helps me by doing my laundry, paying my bills, and running errands for me.	.53	.06
My mother helps me with decisions about my social life.	.15	.76
How often do you have contact with your mother?	.11	.74
When I have a problem in my life, I wait to act on it until I talk to my mother.	.01	.73
My mother checks up on me to see if I need anything.	.13	.72
When I need something, my mother takes care of it for me.	.11	.67
My mother helps me by doing my laundry, paying my bills, and running errands for me.	.14	.50

*Note.*  $N = 223$ . Total variance explained = 50.79%. Cronbach's alpha was .81.

Table 4

*Correlations and Descriptive Statistics*

	1	2	3	4	5	6	7	8	9	10	11	12
1 Competence	-											
2 Stress	-.44***	-										
3 Avoidance	-.08	.10	-									
4 Anxiety	.05	.13 <sup>†</sup>	.54***	-								
5 Over-involved	-.02	.13 <sup>†</sup>	-.67***	-.38**	-							
6 Peers Ahead	-.34***	.57***	-.01	.01	.16*	-						
7 Ahead of Peers	.51***	-.37***	.04	.12 <sup>†</sup>	-.11 <sup>†</sup>	-.42***	-					
8 Friend Quality	.26***	-.18**	-.16*	-.09	-.03	-.07	.01	-				
9 Internalizing	-.31***	.31***	.21**	.23**	-.06	.17*	-.05	-.39***	-			
10 Age	.17*	-.11 <sup>†</sup>	.02	.07	-.11	-.00	.06	-.07	.08	-		
11 Income	-.02	.01	-.27***	-.19**	.22**	.04	-.03	.02	-.01	-.01	-	
12 Ethnicity	.08	-.08	-.15*	-.01	.01	-.12 <sup>†</sup>	.22***	.07	.02	-.07	.34***	-
Mean	3.38	3.30	3.20	1.69	2.81	2.52	3.18	3.95	1.90	20.28	3.23	.45
Std. Deviation	.71	.88	1.42	1.12	.77	1.09	1.06	.57	.54	1.23	1.49	.50

Note.  $N = 223$ ; <sup>†</sup>  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 5

*Hierarchical Regression Models Predicting Transition Stress and Competence*

	Stress			Competence		
	$\beta$	$p$	Total $R^2$	$\beta$	$p$	Total $R^2$
Step 1			.09***			.03
Avoidance	.27	.01		-.24	.02	
Anxiety	.12	.12		.13	.10	
Over-involved	.36	.00		-.13	.14	
Step 2			.40***			.35***
Avoidance	.14	.09		-.08	.33	
Anxiety	.13	.04		.08	.26	
Over-involved	.18	.02		.03	.69	
Peers Ahead	.46	.00		-.15	.02	
Ahead of Peers	-.18	.00		.44	.00	
Friendship Quality	-.11	.05		.24	.00	
Step 3			.45***			.43***
Avoidance	.10	.21		-.02	.78	
Anxiety	.13	.04		.12	.06	
Over-involved	.16	.02		.10	.20	
Peers Ahead	.41	.00		-.04	.54	
Ahead of Peers	-.09	.15		.40	.00	
Friendship Quality	-.02	.78		.17	.00	
Internalizing	.14	.02		-.18	.00	
Age	-.08	.15		.15	.01	
Income	-.01	.85		.00	.99	
Ethnicity	.04	.74		-.05	.66	
Transition Stress	–	–		-.20	.00	
Transition Competence	-.19	.00		–	–	

Note.  $N = 223$ . \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .