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Pathways to Marriage: Relationship History and Emotional Health as Individual Predictors of Romantic Relationship Formation

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Predictors of Romantic Relationship Formation

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ABSTRACT

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The process of forming a committed, romantic relationship is described as a developmental phenomenon that cannot be accurately viewed without the context of prior relationship experiences because the social competencies that facilitate successful navigation of the tasks of relationship formation are developed in relationships. Furthermore, a cumulative relationship history that has a negative influence may lead to poor emotional health, further disrupting relationship formation processes through that mechanism. Hypotheses were tested using data from a prospective longitudinal study of participants (218 women, 174 men) who were not in a romantic relationship at initial data collection and reported on their relationship status 4 times over the course of 1 year while completing the READY or RELATionship Evaluation (RELATE). Cumulative relationship history and emotional health prospectively predicted the intercepts in longitudinal growth curve analyses of relationship status, while mediational analyses supported the hypothesis that emotional health partially mediates the influence of cumulative relationship history on relationship status. The findings support the developmental conceptualization that inter- and intrapersonal capacities increase the probability of forming a committed, romantic relationship over time.

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Introduction and Purpose of the Study

Marriage is an intrinsic good for individuals and society (Marquart, Blankenhorn, Lerman, Malone-Colón, & Wilcox, 2012). Indeed, a vast body of research has identified many benefits of healthy marriages to couples, children, families, and communities (Kiecolt-Glaser & Newton, 2001; National Marriage Project, 1999). While the personal and societal benefits of a thriving marriage culture are many, the United States witnessed a dramatic shift in the social customs pertaining to dating, courtship and marriage in the late 20th century (Cate & Lloyd, 1992). The consequent imprecision of norms informing relationship initiation and formation are leaving some young adults confused or afraid about their prospects for forming long-term, high-quality romantic relationships (Paul, Wenzel, & Harvey, 2008), despite a large percentage of youth who desire a successful marriage (Bachman, Johnston, & O'Malle, 2011). The purpose of this study is to contribute to the basic scientific understanding of pathways to marriage by investigating dynamic, psychological factors that may promote the likelihood of transitioning into a romantic relationship, a precursor to marriage in Western society.

The interest in stable, high-quality marriages has garnered an impressive and worthy amount of research (Karney & Bradbury, 1995), but less is known about how people form committed, romantic relationships. Though research from different academic fields has offered attention to topics of mate selection, social dating, courtship, marriage formation, and others under the same conceptual umbrella, study of the actual transition from being single to being in a committed, romantic relationship remains particularly absent (for an exception, see Schindler, Fagundes, & Murdock, 2010). The cost and challenge of longitudinal studies required to isolate such a transition are not the only barriers to such investigation. The complexity of individual, interpersonal, and contextual influences affecting relationship initiation and formation, as well as

the wide range of trajectories possible from "hello," make it challenging to study relevant factors for prospective prediction.

Using a developmental perspective and attachment theory, this study will investigate individual factors that may theoretically influence the likelihood of transitioning from being single into committed forms of romantic relationships, including marriage. A focus on dynamic, psychological characteristics will narrow the study to that which exists prior to the relationship being formed and which lends to some degree of intervention. This might contrast with static, biological influences and interpersonal interactions, such as physical attractiveness and interpersonal communication. A developmental conception of "capacities for intimacy" will instruct theorizing about factors increasing the likelihood of forming a relationship, while alternatively influencing conceptions of "barriers" to the same. Addressing the significant gap in the empirical literature will provide clinicians, relationship educators, and researchers with evidence of escalators and barriers to relationship formation while guiding their efforts to intervene in benefit of those interested in forming a romantic relationship or marriage.

Review of the Literature

The study of relationship formation is broadly couched in the modern study of personal relationships. Two major research paradigms have been developed to understand dating and mate selection: the social-psychological and family science (Perlman, 2008). Sociology used social exchange approaches to look at dynamics of the relation that affect romantic relationship formation. Social psychology focused largely on interpersonal attraction, garnering a large body of experimental evidence about predictors of attraction. Family scientists sought to address how and why relationships progress toward marriage (Surra, Gray, Boettcher, Cottle, & West, 2006). Marked with variations and exceptions, this overall umbrella is typified by a desire to understand

the uniting of two individuals in a specific kind of relationship, exploring the "who, with whom, what, when, where, and why" of individuals forming romantic unions. For example, questions have addressed how individual characteristics like physical attraction or social status, interpersonal dynamics like self-disclosure or behavioral exchange, and larger systems, such as parental approval or economic conditions, might impact the formation of such unions.

Responding to both social changes and shifts in research paradigms, recent decades have seen a shift to investigating "universal" properties of relationships (Surra et al., 2006). The increase of non-normative courtship and dating patterns has resulted in a much wider variety of romantic relationship interests and ends. Cohabitation, "hook-ups," "friends with benefits," and other similar changes to the once normative "courtship continuum" have necessitated an expansion of what is viewed as part of the study of romantic ties (Guerrero & Mongeau, 2008; Halpern-Meekin, Manning, Giordano, & Longmore, 2012; Paul, Wenzel, & Harvey, 2008). While Surra et al. (2006) suggest that the study of relationship development as progress toward marriage has vanished in recent reviews, the importance of understanding such progress has not diminished, given the societal benefits of a marriage culture. This study will address the topic of marriage formation, cognizant of the lens of "universal" properties to which these findings relate.

Before turning to the theoretical and empirical background for this study, a brief description of terms is needed to differentiate and narrow the topic. A romantic relationship is foremost a union of two people with a history and context that support ongoing transactions (Hinde, 1979) and involves some degree of interdependence. Scanzoni defines interdependence as "the reliance of actors within any social system on other actors within that system for valued rewards, benefits, [and] gratifications," offering it as an approach to the "ongoingness" of social systems because the relationship becomes rewarding in and of itself (1979, p. 61; Lawler, 2002).

Furthermore, as partners increase their investment in the relationship, their commitment to the relationship also increases (Rusbelt, 1983).

Because there are many types of relationships, the structure and processes of relationships can be used to define and differentiate them. For example, while friendship is one dimension of a romantic relationship, its presence alone does not address all pertinent dimensions of a romantic union. Perspectives that have been offered about essential characteristics of a romantic relationship suggest that romance includes both companionate and passionate love (Sternberg, 1987). Using attachment theory, Furman and Wehner (1997) suggested that four behavioral systems are typically active in adult romantic attachments: the attachment, affiliative, care-giving, and sexual reproductive systems. Though typically an antecedent to marriage in this culture, a romantic relationship is not marriage, since long-term cohabitating couples may share these same features while lacking the additional features of marriage.

It is necessary to acknowledge the cultural variations that may exist in relation to what is here described as a "romantic relationship." This is especially so because "romance" and the expectation for it to be a dimension of a long-term, sexual pair-bond are not understood to be human universals in time nor place. While all societies have provisions regarding sexual pair-bonding, i.e. marriage, the makeup of such unions is not universal, nor is the subjective experience of romance as part of these unions. Thus, sexual bonding could be viewed as a critical dimension of the type of relationship being described cross-culturally, but that dimension alone also lacks all the essential characteristics of marriage, since sexual relations can and do occur outside of these unions. Given the cultural specificity of romance being a dimension of sexual pair-bonding, the intentional use of the term "romantic relationship" couches this study in

the culture to which it pertains. The findings may be specific to cultures that subscribe to the practices of social dating and prescribe romance as a dimension of committed, sexual pair-bonding. Consequently, the author does not intend to address universal or cross-cultural validity of the present study.

Theoretical Context

The value of applying a theoretical framework to guide the selection of variables has been cited in marital research (Karney & Bradbury, 1995). In a 50 year review of longitudinal research on marriage, those authors concluded that a primarily atheoretical approach led to a broader understanding of marriage, but not a deeper understanding because the findings did not advance the field toward a thorough explanation unifying those findings. In search of a more thorough explanation of dynamic, psychological characteristics affecting romantic relationship formation, a developmental framework drawing on attachment theory will be used to select study variables and interpret findings.

Development. Although broader than the theoretical level, the developmental perspective is important to bring to the study of romantic relationship formation because it can help in conceptually organizing the intrapersonal and interpersonal capacities required to form successful, long-term bonds and aid in identifying potential intervention points across the lifespan, including adolescence and uncoupled emerging adulthood (Carroll, Badger, & Yang, 2006). A developmental perspective concerns itself with the increasingly complex organization of emotion, cognition, and behavior over time, as well as the individual differences that manifest themselves in such organization (Sroufe, Egelund, Carlson, & Collins, 2005).

Turning the tools of a relationship development perspective toward marriage formation may suggest that the processes by which successful marriages form and endure are

developmental phenomena emerging from previously acquired marital competencies. Marital

competence has been defined as: "the set of behaviors that enable an individual to form an

enduring romantic union that is mutually satisfying to both partners" (Donnellan, Larsen-Rife, &

Conger, 2005, p. 563) and has been further described as a developmental organization of

capacities in interpersonal (e.g. effective negotiation) and intrapersonal (e.g. other-centeredness,

personal security) domains (Carroll, Badger, & Yang, 2006). The example of intimacy, one

central capacity for marital competence, illustrates the dynamic nature of this construct. Intimacy

has been defined as:

> an interpersonal process within which two interaction partners experience and express
>
> feelings, communicate verbally and nonverbally, satisfy social motives, augment or
>
> reduce social fears, talk and learn about themselves and their unique characteristics, and
>
> become "close"…(Reis & Shaver, 1988, pp. 387-388).

Even as an interpersonal process, the capacities for intimate peer or romantic interactions draw

on intrapersonal abilities such as emotional awareness and positive self-esteem, both needed to

be aware of feelings and to risk expressing them.

The framework of marital competence has been used to show meaningful differences in

marital satisfaction and stability based on individual differences in particular competencies, such

as skills in negotiation or a disposition of other-centeredness (Carroll et al., 2006; Donnellan et

al., 2005). Importantly, however, the study of marital competence has focused on the role of

these capacities in maintaining healthy relationships and preventing deterioration of already

established relationships, even while the roots of marital competence may be found in prior

experiences and capacities developed before the formation of the romantic relationship. Of

particular interest in this study is the possibility that the individual capacities represented by

marital competence may predict the very likelihood of romantic relationship and marriage formation. If understanding marital competence as a complex organization of capacities that together gives rise to the interpersonal and intrapersonal capacities needed to form an enduring romantic union, then individual developmental history becomes a relevant level of analysis even before initiation of the relationship.

From the developmental view, the capacities of marital competence are assumed to be qualitatively distinct manifestations of previously attained capacities, such that individual adaptations and differences in the present are assumed to be partly affected by previous experiences and capacities. An example may clarify how these assumptions relate to adult relationship functioning. In a longitudinal study, Simpson, Collins, Tran, and Haydon (2007) found support for a double mediation model wherein securely attached infants were rated as more socially competent during early elementary school (formative capacities of relationships), which in turn forecasted relationship security among close friends at age 16 (evidence of preparatory capacities), which in turn predicted more positive daily emotional experiences in adult romantic relationships and less negative affect in conflict resolution and collaborative tasks with their partners. This exemplifies how a developmental view can be used to identify prior capacities as the roots of more complex capacities in established romantic relationships.

Considering the capacities needed to form relationships leads us to the impact of developmental history on the likelihood of transitioning into a romantic relationship. It has been noted that relationship capacities are attained by the individual, but the process by which they are developed is dyadic (Bronfenbrenner, 1979). It is within the family environment that children learn about the nature of relationships they can expect to experience as they mature, their socialization thus informing adaptive reproductive strategies within the ecological context of

their family system (Belsky, Steinberg, & Draper, 1991). Parents rear their children within dyadic systems that are themselves embedded within multiple social systems, thus being influenced by their larger ecological context. The parent in a context with more resources and lower ecological stress may interact with their offspring in patterned ways that differ from those in higher stress environments, providing different experiences of self-in-relationship and the context for developing different capacities for relating interpersonally. Thus, we would expect the developmental history of children to affect psychological and behavioral orientations in romantic relationships in a cumulative-conditional probability conceptualization (Sroufe et al., 2005), whereby certain antecedent conditions increase the probability of a certain outcome while the presence of some but not all of those conditions would result in a lower probability of that outcome. In this case, we would expect early attachment relationships and other nurturing relationship experiences within the family-of-origin to increase the probability of developing the capacities needed for successful adolescent romantic relationship experience, which would lead to an increased probability of acquiring and developing the capacities to form, maintain, and increase interdependence in an adult romantic pair-bond. A review of one prominent dyadic developmental theory is offered to further elucidate the potential impacts of developmental experiences, followed by a summary of the proposed model.

Attachment. One of the most prolific developmental theories in terms of research and application is Bowlby's attachment theory (Bowlby, 1979). Originally formulated to explain the child-caregiver bond, the implications of the findings and theory quickly stretched, as Bowlby predicted, from "the cradle to the grave" (p. 129). The application of attachment theory to adult pair-bonding was done precisely to understand adult romantic relationships (Hazan & Shaver,

1994) and has produced a rich empirical and theoretical literature (Mikulincer & Shaver, 2007) that is relevant to our study of adult romantic relationship formation (Creasey & Jarvis, 2008).

Normative attachment development in children provides security during the heightened vulnerability of infancy and early childhood, but it does more than that. It is also within this dyadic relational context that individual capacities for organismic functioning develop (Sroufe et al., 2005). In prototypical child-caregiver attachment relationships, the relationship is marked by four defining features that have been argued as being present in mature adult romantic relationships, namely proximity seeking, a safe haven, separation distress, and a secure base (Zeifman & Hazan, 2008). The recognition of romantic relationships as attachments *per se* has suggested the inference that these adult pair-bonds are formed in similar ways as parent-child attachments (Zeifman & Hazan, 2000). The four-phases of the process model of adult attachment formation are 1. Pre-attachment 2. Attachment-in-the-making 3. Clear-cut attachment and 4. Goal-corrected partnership. Just as with newborns, the initial phase is marked by rather indiscriminant social signaling because the individual who will become the preferred partner has to be selected. Then, just as infants begin to prefer the individual who has been their primary caregiver, a narrowing of social signals and other behaviors takes place as an adult attachment is being made. Eventually, familiarity brings about a felt sense of security in which separation causes distress, which may be one marker of an adult and child "clear-cut" attachment. Finally, toddlers eventually reduce their attachment-related behaviors when the caregiver's reliability is taken to be a given; life takes on a "business-as-usual" stance as other activities become of greater interest even while many functions, such as sleep and eating cycles, are co-regulated between organismic systems. This type of goal-corrected partnership is similarly seen in adult

romantic relationships when interactions are typically mundane and life as usual becomes the predominant focus of attention instead of the formation and securing of the attachment.

Again extrapolating from the infant attachment literature, adult romantic relationships have been shown to exhibit similar individual differences from the normative "secure attachment" trajectory. Secure attachment serves to protect a person by ensuring proximity to care-giving others in times of threat, pain, or need by activating various behavioral sequences to achieve a set-goal of "felt security" (Sroufe & Waters, 1977). When attachment behaviors are unsuccessful in attaining the desired set-goal, secondary attachment strategies may be activated to adapt to the relational conditions, either increasing behaviors to elicit a secure response from caregivers or deactivating the attachment system. While anxious clinging and detached avoidance were originally identified through experimental separations and reunions of mothers and infants (Ainsworth et al., 1978), research suggests two major dimensions of secondary attachment strategies in adult romantic relationships: anxiety and avoidance (Fraley & Waller, 1998). Anxious attachment strategies are characterized by clinging or jealous behavior used to seek closeness because of hypervigilance to relationship threats, abandonment, and negativity (Mikulincer & Shaver, 2003). Avoidant strategies often take the form of disparaging intimacy and degrading close others in an effort to cut off from painful experiences of loneliness in the face of threat or distress; it is often characterized by distancing, inflated self-concept and extreme independence.

Attachment anxiety is related to self-focused attention on unmet attachment needs and worries, which decreases one's ability to genuinely engage with a partner because the brain is focused on threat (Coan, 2010). Flirting and dating are likely to be hampered because of a more consistent negative emotional tone (Mikulincer & Shaver, 2007) and a reactive affect regulation

strategy (Klohnen & Luo, 2003). The rigid use of these reactive affective strategies drawing attention to their problems may eventually become tiresome to others, leading others to react negatively toward the individual, or even start to avoid or reject them. Furthermore, anxious attachment is associated with a self-presentation of being needy or overeager and self-disclosing prematurely and indiscriminately, which may have the effect of overwhelming potential partners early on in relationship initiation during the "pre-attachment" phase that is normatively less intimate. There is some initial evidence of the negative effect of attachment anxiety on relationship initiation from the partner's perspective (McClure & Lydon, 2014). Although their model of self-in-relationships would suggest goal-strivings for a committed, romantic relationship to provide security, anxious attachment is associated with stronger fear of failure and striving to avoid it (Elliot & Reis, 2003), which would hamper goal-oriented behavior in relationship formation. Furthermore, it appears that anxious attachment is related to significant ambivalence toward commitment in adult romantic relationships, wherein worry about negative evaluation buffers the desire for dependency (Joel, MacDonald, & Shimotomai, 2011). Taken together, it is likely that those endorsing anxious attachment in adulthood carry some liabilities in the domain of relationship initiation and formation.

Attachment avoidance may not pose a significant problem in early pre-attachment processes, but possibly interrupt romantic relationship formation in the attachment-in-the-making phase. Even though attachment avoidant individuals generally fare poorly in hypothetical mate selection studies (Klohnen & Luo, 2003), their actual behavior in early dating situations may not compromise their likelihood of initiating a romantic relationship beyond their own lack of desire to do so. Specifically, the emotional tone of their interactions, as marked by egotism, inhibited self-expression, and overemphasis on sexuality (Mikulincer & Shaver, 2007) may be interpreted

as positive qualities in initial interactions for some partners who are looking for sexually available, confident partners. Attachment avoidance is associated with more positive attitudes toward casual or non-committed sex (Schmitt, 2005) and a "player" mating style (Cunningham & Barbee, 2008). Because romantic relationship transitions are often marked by various sexual interactions that often signal romantic interest, like kissing or intercourse (Guerrero & Mongeau, 2008), this stance could facilitate entrance into romantic relationships that are instrumentally rewarding for individuals with an avoidant attachment style despite their partner's interest in developing a longer-term relationship. Thus, it is possible that an avoidant attachment style is only detrimental later on in relationship formation when cultural norms for romantic relationship development are violated. In particular, we would expect that an avoidant attachment style will lead to violations of norms for reciprocal emotional disclosure that facilitate emotional intimacy, since attachment avoidance is associated with limited and non-intimate disclosures (Bradford, Feeney, & Campbell, 2002; Mikulincer & Nachshon, 1991). Furthermore, the narrowing of social signals and behaviors to a preferred partner along with a reduction in individual interests inherent in greater interdependence is likely to run counter to their stance toward commitment in romantic relationships (Morgan and Shaver 1999) and preference for independent functioning (Mikulincer & Shaver, 2003). Finally, the subjective experience of emotional attachment that is central to the attachment-in-the-making phase (Zeifman & Hazan, 2000) is likely to be disrupted, as attachment avoidance is associated with deactivating strategies that actively repress conscious awareness of attachment feelings (Fraley, Davis, & Shaver, 1998). Therefore, we would expect an avoidant attachment style to disrupt the developmental processes that transition casual dating relationships into committed, romantic bonds. The empirical evidence to date supports this conclusion (Schindler, Fagundes, & Murdock, 2010).

Summary and Proposed Model

The ecological context of the child-rearing relationship provides the backdrop against which development occurs (Bronfenbrenner, 1979). Within their attachment relationships, the child learns about themselves and others, even while each attachment dyad is affected by the care-giver's own developmental history and social context (Belsky & Isabella, 1988; Belsky, 1996). If the context increases the probability of experiences supporting a secure attachment, basic capacities for self-regulation are developed, followed by increasingly complex organizations of functioning that support healthy peer relationships (Sroufe, et al., 2005). When reviewing Reis and Shaver's definition of intimacy (1988), we can clearly see how the experiences of attachment security in early childhood would facilitate development of many of the basic building blocks out of which peer and romantic intimacy emerge. Acceptance of emotional experience and facilitation of its expression, communicating internal states in both verbal and non-verbal ways, having the other respond to those communications in positive ways, extinguishing social fears through acceptance and security, and learning about the self and self-in-relationship are all clearly indicative of secure attachment in child-caregiver relationships, despite this definition being primarily oriented to adolescent and adult relationships. Because of this, an understanding of attaining competence in adult romantic relationships cannot be divorced from the developmental history in which the adult's present functioning is embedded. For this reason, the role of adolescent relationships and prior romantic relationships are relevant components of the cumulative developmental history of the young adult navigating the task of marriage formation.

Transformations in peer relationships during adolescence may signal a transfer in attachment needs and behaviors from parents to peers (Allen & Land, 1998), a developmental

preparation for a future transfer of attachment needs to an adult, romantic partner. Indeed, Ainsworth (1989) considered adolescent romantic relationships an endpoint of developing peer relationships and saw the capacities for lifelong attachment relationships developing in adolescence, even though adult pair-bonding includes sexual/reproductive and caregiving systems. Still, a developmental function of adolescent romantic relationships may be experimentation with increasingly interdependent exchanges (Laursen & Jensen-Campbell, 1999) that afford the developmental tasks and oscillations between previously developed capacities and new emergent capacities that are required to achieve the transition into an adult romantic relationship. As a continuation of this process, one task of emerging adulthood may be experimentation with different kinds of romantic relationships, from the ego-centric to those more oriented to caring for others (Carroll et al., 2009), a central competency in marriage (Carroll et al, 2006). Indeed, attaining the capacity to integrate individual and partner aspirations within the context of genuine dyadic functioning may be so central to maintaining long-term interdependence as to mark a distinct stage during the transitional period of emerging adulthood, as some have suggested (Shulman & Connolly, 2013). In this stage-based view of romantic development, the long-term commitment represented by marriage is only possible after this task is achieved.

From a developmental perspective, the experiences in different romantic relationships might provide the tasks or context out of which "emergent" capacities of the individual are developed in the service of marital competence. In other words, the experimentation associated with different romantic experiences in emerging adulthood may provide individuals with the novelty and challenge required to develop a more complex organization of behavior, affect, and cognition from the material of prior capacities and experience. The challenges allow for

oscillations between an individual's previous functioning and new functioning based on emergent capacities (i.e. more complex organizations of behavior, affect, and cognition), even while previously acquired capacities, such as those gained in care-giving or elementary school peer relationships, may affect the probability of successfully navigating the novel relational tasks (Sroufe, et al., 2005). In the task of navigating transitions to form an increasingly interdependent relationship toward marriage, individual development of relationship capacities occurs simultaneously with the formation of a relationship.

Model proposed. A theoretical model depicting developmental impacts on relationship formation addresses multiple influences that might be described as a cumulative relationship history. The conceptual definition of a positive cumulative relationship history for this study is comprised of three components. First, the adult perceives their family-of-origin experiences as conducive to forming close relationships and that negative experiences from childhood occurring in their family-of-origin have been resolved emotionally. Second, the respondent perceives their experiences in romantic relationships as conducive to forming close relationships, negative experiences occurring in prior romantic relationships have been resolved emotionally, and they endorse a mental template of romantic relationships as being positive or desirable to be in. Third, they report the use of primarily secure adult attachment strategies. It is important to acknowledge that this definition is not comprehensive of all relevant relationship history factors, and that competency in adult partnerships includes many relevant facets beyond attachment and perceptions of prior relationship history (Ainsworth, 1991), such as observed skill in negotiation or self-disclosure. It is hoped that further refinement of theoretical models will encourage empirical testing of many relevant relationship competencies in relationship formation, even while this initial conceptual definition provides some test of the complex developmental

processes described above. Furthermore, the focus on psychological characteristics surely excludes some potent predictors of relationship formation, such as physical attraction, which is associated with increased dating and relationship formation (Paulsen, Holman, Busby, & Carroll, 2012).

The theoretical model proposes that single individuals who have experienced a more positive cumulative relationship history will have a higher probability of forming more committed forms of romantic relationships over time. This is hypothesized because a positive cumulative relationship history will represent more acquired competence in navigating the transitions leading to increasingly committed forms of romantic relationships.

A final consideration in the impact of cumulative relationship history on romantic relationship formation is emotional health. It is probable that poor emotional health has some effect on the formation of romantic relationships over time (McLure & Lydon, 2014; McLure, Lydon, Baccus, & Baldwin, 2010). Although the etiology of conditions representing poor emotional health are multifaceted, including notable heritable and psychological components (Ormel, Bastiaansen, Riese, Bos, Servaas, Ellenbogen, et al., 2012), a negative relationship history as described previously is a significant predictor of both depression and anxiety (Bogels and Brechman-Touissant, 2006; Gate et al., 2013; Rapee, 1997; Vasey & Dadds, 2001; Zhao, 2013). Therefore, I hypothesize that emotional health will partially mediate the effect of cumulative relationship history on romantic relationship formation (see Figure 1).

Figure 1. *Proposed model*
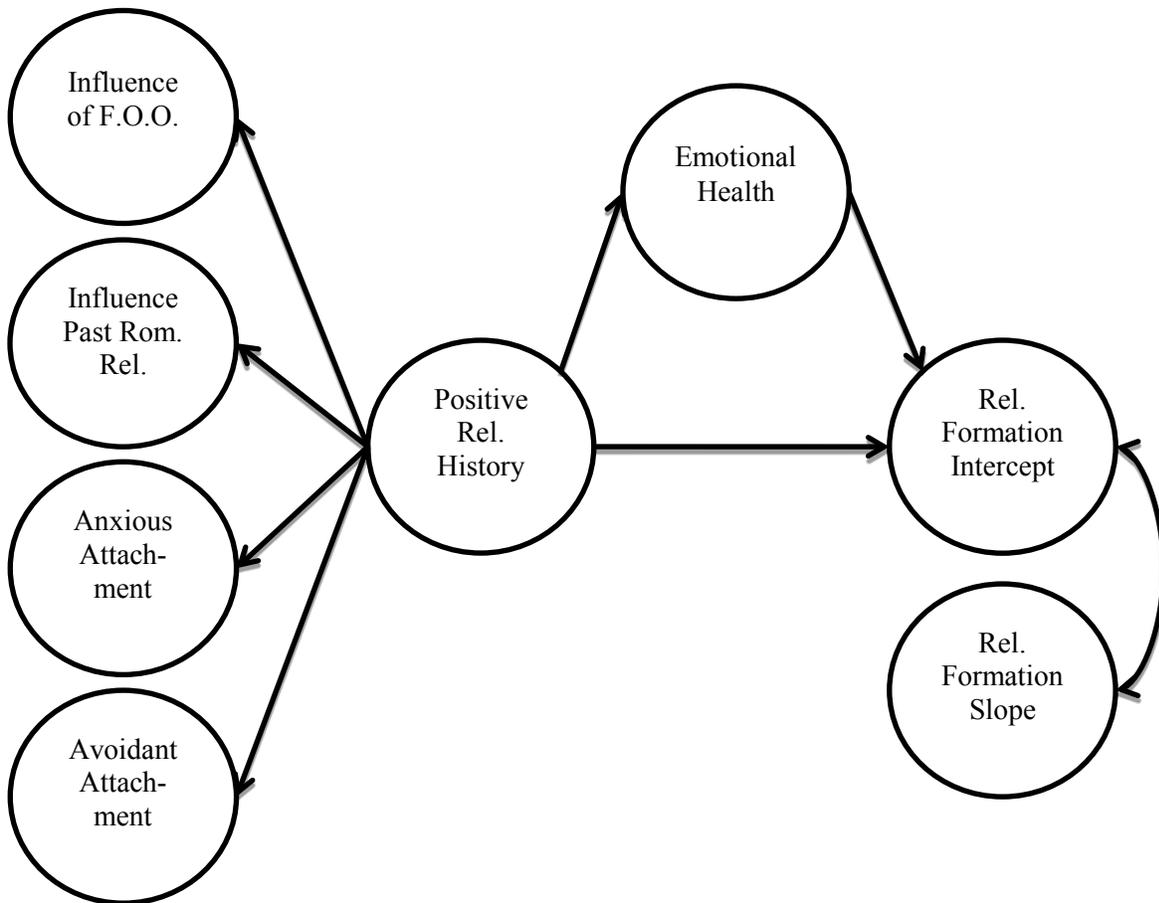
Empirical Literature

Despite the vast literature that is relevant to the prospective prediction of romantic relationship formation, the empirical study of romantic relationship formation is itself quite limited. A review of evidence related to the theoretical model highlights what is known about romantic relationship formation and the gap in the empirical literature that this study addresses.

Many high quality longitudinal studies have been conducted wherein prior relationship experiences were measured, but the likelihood of forming committed, romantic relationships has rarely been a targeted outcome. Instead, adult romantic relationship quality has been the focus (e.g. Conger, Cui, Bryant, & Elder, 2000), along with other areas relating to the nature of a

relationship that has already formed (e.g. Simpson et al., 2007; Feldman, Gowen, & Fisher, 1998). In this way, very few studies have given treatment to the question: "Are some people more likely than others to form a committed, romantic relationship over a given period of time?" This leaves the identification of relevant predictors of relationship formation mostly to theoretical inference, as offered previously.

The notable exceptions do provide preliminary evidence for the role of prior relationship experience in predicting relationship formation. Children assessed in the Strange Situation at 12 and 18 months of age reported on their adolescent romantic relationship experience (Sroufe et al., 2005). Anxious attachment was associated with a lower likelihood of having formed a romantic relationship while avoidant attachment was not related to the likelihood of forming a relationship, but was predictive of shorter relationship length compared to secure attachment. The authors cited both preparatory relationship capacities and later peer-relationship competence as factors in predicting this association. In a longitudinal study of 90 undergraduate college students who were not dating at initial data collection, Schindler et al. (2010) found that prior romantic relationship experience significantly increased the odds of dating, while self-reported adult attachment avoidance significantly lowered the odds of committing to a romantic relationship.

One possible explanation of the slightly discrepant findings regarding attachment avoidance may relate to the type of romantic involvement endorsed by attachment avoidant individuals in their respective developmental stages. Cunningham and Barbee (2008) present findings that avoidant attachment is related to a "player" mating style, which could possibly facilitate entrance into short-term relationships without expectation of commitment, such as "friends with benefits" (Guerrero & Mongeau, 2008). This might account for what Schindler et

al. (2010) found that attachment avoidance did not reduce the odds of dating casually, only of committing to a relationship. In contrast, Sroufe et al. (2005) are reporting on early to mid-adolescent relationship formation, a developmental period wherein having more sexual partners is associated with early dating (Zimmer-Gembeck & Collins (2008). Therefore, adolescents with a history of attachment avoidance may be more likely to experience sexual relations in some form of "dating" relationship, despite these relationships being more short-lived than the relationships of their secure peers.

The other notable finding from Schindler et al. (2010) partially supports the theoretical model, but leaves some questions for further study. Namely, that prior romantic relationship experience significantly increased the odds of dating is in support of the model, but that it didn't increase the odds of committing to a romantic relationship does not. As cited previously, developed capacities from prior relationships form an important base from which new capacities may be developed (Simpson et al., 2007). The capacities for increasingly interdependent romantic exchanges are most likely to have developed in dyads facilitating that development previously. In an 8-year longitudinal study of German youth, subjects reporting romantic relationship experience at each time point showed significant increases in relationship quality at each age (Seiffge-Krenke, 2003). The author suggests that the quantity of exposure to romantic relationships provides the individual with learning experiences, citing skill development as one likely outcome. In the case of Schindler et al. (2010), we would have expected that those individuals with more prior relationship experience would have developed not only the skills needed to date casually (which was suggested by their findings), but also to have acquired the skills to navigate the transitions from casually dating to committed. A larger sample and assessment of the impact of those prior relationships (as being conducive to wanting to be in a

romantic relationship versus having had a negative impact on the individual) is needed to clarify these results.

The extant empirical findings provide some support for a theoretical model, but lack additional important information. Sroufe et al. (2005) report on a developmental period that is markedly different than one in which marriage formation might be appropriate or expected within the sample, therefore truncating the range of levels of interdependence and commitment in a romantic relationship. Furthermore, as noted above, adolescent romantic relationships are typically seen more as preparatory to, but qualitatively different from, the types of romantic relationships being queried here. The study completed by Schindler et al. (2010) encountered a similar truncation in the range of levels of interdependence and commitment by virtue of the dating statuses reported, namely no dating, casual dating, or committed dating. This was likely influenced by the length of the study, given that the mean duration of study participation was 8.4 months, a period that may have been insufficient for appreciable numbers of more committed types of relationships to form, such as engaged or married unions. The present study sought to address these issues by prospectively following a large young adult population for a longer period of time and measuring a larger range of relationship statuses, including marriage.

The present study builds on prior research by introducing a measure of emotional health and testing its role as a mediator on the influence of cumulative relationship history and relationship formation. The use of structural equation modeling (SEM) reduces measurement error and thereby allows more accurate specification of the theoretical model than has been afforded in previous studies. Finally, the latent growth model allows modeling of the trajectories of growth in relationship formation, an advantage over dichotomizing relationship status and performing a logistic regression to predict the odds of dating or forming a relationship, given that

the theoretical model proposes relationship development. In this model, the sample means of the estimated intercept and slope, along with their respective variances and their covariance, can be modeled to provide information on the key features of the average observed change trajectory. To date, no empirical studies of romantic relationship formation that I am aware of have used this kind of analysis.

Hypotheses

1. A positive cumulative relationship history will predict final relationship status. The intercept in this kind of analysis represents the mean level for relationship status at the final wave of data collection, 12 months from initial data collection. The hypothesis states that higher cumulative relationship history scores will be associated with a higher level of relationship status (representing a greater degree of interdependence and commitment to the relationship) at 12 months from initial data collection (the intercept).

2. Emotional health will predict the final relationship status. This hypothesis will be tested using a similar, separate model as described for hypothesis 1.

3. Emotional health will partially mediate the effect of cumulative relationship history on the final relationship status. This hypothesis is conditional upon both hypotheses 1 and 2 being supported. If they are supported, then additional mediational analyses will be tested with the same outcome as for hypothesis 1 and 2. Cumulative relationship history will predict emotional health, which will predict final relationship status (the intercept), and the path from cumulative relationship history to the intercept will be reduced in size, but not eliminated.

Method

Sample

Participants from the Pathways to Marriage study were 392 (218 women, 174 men)

single, never married, heterosexual adults at a large, western university who completed at least

one wave after the initial wave of data collection. All participants were single at time 1, when

measures of all predictor variables were collected.   These criteria excluded 206 participants who

completed initial data collection; 91% (188) were dropouts and the rest were either currently in a

committed romantic relationship, reported having been previously married, or endorsed a

homosexual orientation. The sample consisted of predominantly Caucasian (94%), LDS (99%),

undergraduate students (87%). Mean age for women was 20 (SD=1.78) and for men, 22

(SD=1.53). Frequencies of relationship status at each wave of data collection, along with percent

missing, are reported in table 1.

Procedure

Participants were recruited using door-to-door and other advertisements throughout a

small geographical area of housing nearly completely composed of college students. This

sampling procedure was employed with the intention of unobtrusively obtaining partner data

both prior to relationship formation and prospectively by sampling in an area that would

facilitate high propinquity and is locally known for producing a high rate of committed dating

and married couples from within the geographical area, such that some portion of dating partners

would be in the original sample and could be matched within the data set by identification

number. A number of such paired couples were identified for a separate study. Collecting data on

both members of a dyad has been suggested as a valuable way of understanding how preexisting

predictors of relationship formation dyadically interact, but protecting fledgling relationship

from undue influence has been cited as a concern (Schindler et al., 2010) that this study hoped to address. Informed consent was obtained and study procedures explained. Continued participation throughout each of 4 time points was incentivized with raffles for popular electronic devices and other items. Participants took the READY or RELATionship Evaluation (RELATE), depending on their relationship status, a total of 4 times over the course of 1 year. For example, an individual not in a relationship would have taken the READY at time 1, then the RELATE at time 2 because they were in a committed relationship, the READY at time 3 because they were not in a committed relationship, and the RELATE at time 4 if their relationship status had changed again. All tests were administered online through the RELATionship Evaluation (RELATE) Institute website (https://www.relate-institute.org).

The RELATE is a 271-item questionnaire created to provide a comprehensive measurement of romantic relationships (RELATE: Holman, Busby, Doxey, Klein, & Loyer-Carlson, 1997). It assesses multiple variables that have been shown to be predictive of relationship satisfaction and variables related to satisfaction as theorized by ecosystemic theory (Busby, Holman, & Taniguchi, 2001). RELATE has been used in a variety of applications, like classroom and counseling settings, to help couples, couple educators, and therapists better understand the factors that contribute to relationship satisfaction. Participants are asked to answer items on a 5-point Likert-type scale (1=never/strongly disagree, 5=very often/strongly agree) as well as answer basic demographic questions. The scales of RELATE demonstrate high internal consistency (between .70 and .90), and have been shown to be both valid and reliable (alpha and test-retest reliability) (Busby et al., 2001). The READY is a version of the RELATE for those not in a relationship, omitting questions relating to a partner.

There is a possibility that the comprehensive measurement provided by the RELATE every 3 months over-taxed the sample, as retention in the study was unexpectedly low. Percent missing on Time 2, Time 3, and Time 4 relationship status were 6%, 35%, and 45%, respectively. This low rate of retention was responsible for prematurely ending the study, which was originally designed to continue for an additional 12 months of 3 waves of data collection, increasing the number of relationships that would have transitioned into more committed statuses, such as engaged or married. None of the focal study variables predicted dropout, although "trait maturity" significantly predicted dropout after time 1. The flexible delivery of the RELATE, administered online, provided participants with access to complete the questionnaire throughout the world if they had left the area at later time points for various reasons common to a college student population (e.g. internships, return to their homes). Because of this flexibility, one plausible explanation of the low retention rate may be the time investment to complete the RELATE without adequate incentive.

Measures

      Relationship status. A variable representing relationship status for each time point was created from participant self-reports on the READY and RELATE. Because participants taking the READY could report being in a romantic relationship ("Which best describes your current dating status?"), their responses were combined with those of participants who took the RELATE, who self-reported their relationship status by answering the following question: "What is your relationship to the person about whom you will be answering the 'partner' questions below?" The combined variable had 5 categories representing: 1. Not dating at all 2. Casual/Occasional dating 3. Committed dating one person/friends with one person with whom they would be answering about their "partner" on the RELATE 4. Engaged or committed to

marry and 5. Married. This resulted in an ordered categorical variable, with higher scores representing greater interdependence and commitment to a romantic relationship. The absence of cohabiting as a relationship status category represents the cultural context within which this study was completed, as pre-marital cohabitation is explicitly proscribed by the religious institution and university which the majority of participants were attending. Use of another question on the RELATE confirmed the absence of cohabitation among the sample participants at any time point.

Attachment dimensions. Participant attachment was assessed using the Adult Attachment Questionnaire (AAQ), a continuous measure based on Hazan and Shaver's three original attachment vignettes (Simpson, Rholes, & Phillips, 1996). It contains 17 items answered on a seven-point Likert-type scale (1 = strongly disagree; 7 = strongly agree) to measure two dimensions of attachment: avoidance and anxiety. The AAQ has demonstrated construct and criterion validity and appears to be a reliable measure of adult attachment (Simpson et al., 1996). The avoidance subscale consists of eight items measuring an orientation toward avoiding or withdrawing from close or intimate relationships. Examples of items include: (1) "I find it relatively easy to get close to others" and "I'm comfortable having others depend on me" (reverse scored). Six items are reverse scored such that a higher total score indicates lower levels of avoidance. The anxiety dimension was measured by nine items assessing the extent to which respondents have conflicted thoughts and feelings about whether others can be counted on in relationships. Respondents scoring high on the anxiety subscale see themselves negatively and are preoccupied with issues of commitment, loss, and abandonment. Examples of items are: "Others often are reluctant to get as close as I would like" and "I often worry that my partner(s)

don't really love me". Four items are reverse scored such that a higher score indicates lower levels of anxiety.

The two subscales are orthogonal and appear to be unidimensional, prerequisites for parceling in structural equation modeling (Little, Cunningham, Shahar, & Widaman, 2002). To better account for measurement error, anxious and avoidant attachment latent factors were constructed by splitting each scale into 3 parcels each, following recommendations of grouping the highest loading items with the lowest, the next highest with the next lowest, and so on. This resulted in three 3-item parceled indicators of attachment anxiety and two 3-item parcels and one 2-item parcel as indicators of attachment avoidance.

Influence of family of origin. A latent variable operationalizing a positive influence of family of origin was constructed using the 3 items from the Family Influence scale on the READY as indicators. Participants are asked to rate their level of agreement to each item on a 5-point Likert-type scale ranging from (1) "Strongly Disagree" to (5) "Strongly Agree." Examples of items include: "There are matters from my family experience that negatively affect my ability to form close relationships," and "I feel at peace about anything negative that happened to me in the family in which I grew up." Two of the 3 items are reverse scored such that higher scores indicate less negative impact from family of origin relationships.

Influence from past romantic relationships. A latent variable operationalizing a positive influence from past romantic relationships was constructed using 3 items from the Influence from Past Relationships scale on the READY as indicators. Participants are asked to rate their level of agreement to each item on a 5-point Likert-type scale ranging from (1) "Strongly Disagree" to (5) "Strongly Agree" in the following way, "How much do you agree with the following statements about relationships, based on your experiences in romantic

relationships?" Examples of items include: "There are matters from my relationships that I am still having trouble dealing with or coming to terms with;" and "From what I have experienced in my romantic relationships, I think relationships are safe, secure, rewarding, worth being in, and a source of comfort." One of the 3 items is reverse scored such that higher scores indicate less negative impact from prior relationships.

Influence of cumulative relationship history. In order to empirically test the developmental theoretical model, a statistical model operationalizing a positive relationship history was constructed (see Figure 1). A positive cumulative relationship history was operationalized as a 2nd-order factor constructed using the following 4 latent factors as indicators: Attachment Anxiety, Attachment Avoidance, Influence of Family of Origin, and Influence from Past Relationships. Given the nature of self-report data, this operationalization is better understood as the individual's perception of their relationship history and the influence it has on them presently, as opposed to other operationalizations that might include observational data or parent/partner report. It is hoped that studies with the ability to test the theoretical model with such operationalizations will offer empirical tests of this study's hypotheses (see Future Directions).

Emotional health. A latent variable representing emotional health was constructed using the Happiness, Calmness, and Self-Esteem scales as indicators. For all three scales, participants rated themselves on trait descriptors using a 5-point Likert-type scale ranging from (1) "never" to (5) "very often". The Happiness scale contains 3 items ("sad and blue", "feel hopeless", and "depressed"); the Calmness scale contains 4 items ("worrier", "fearful", "tense", and "nervous"); and the Self-esteem scale contains 4 items ("I take a positive attitude toward myself", "I think I am no good at all", "I feel I am a person of worth", "I am inclined to think I am a failure").

Items are reverse-scored to positively indicate higher trait happiness, calmness, and self-esteem. Cronbach's alpha for the Happiness, Calmness, and Self-esteem scales in this sample are 0.832, 0.772, and 0.827, respectively.

Analyses

  Preliminary analyses. The longitudinal nature of the study presented certain challenges. Percent missing on Time 2, Time 3, and Time 4 relationship status were 6%, 35%, and 45%, respectively. Because the original study design assumed a high rate of retention, the actual amount of attrition required some modifications to analytical design. A quadratic growth pattern could not be tested with the number of observations. Additionally, only those analytical models that were compatible with modern methods of handling missing data (Wilson, Barrett, & Stuchell, 2014) were seen as appropriate. Full information maximum likelihood (FIML) was used so that the highest number of viable observations could be used. This method of handling missing data allowed retention of all missing data patterns except a monotone missing pattern where only time 1 data were collected, resulting in the inclusion of 168 cases that had missing data in at least one of the later waves of data collection. Simpler methods of handling missing data with such a high level of attrition (e.g. 45% for time 4) could have possibly biased estimates.

  Analyses of missing data were conducted. The assumption of missing completely at random (MCAR) was not met, as "trait maturity" significantly predicted dropout after time 1. This was used as an auxiliary variable to improve estimation in the models that did not include bootstrapping. None of the focal study variables or controls predicted dropout, however.

  Descriptive statistics of the sample were calculated, including participant age, gender, education level, religion, and race/ethnicity. Descriptive statistics of measures were calculated

and analyzed for score distribution (see Table 2). Construction of the latent factors, using

Confirmatory Factor Analysis (CFA), preceded development of the full measurement model,

from which zero-order correlations of study variables were calculated (see Table 3 for factor

loadings and Table 4 for correlations). Preliminary analyses were run in SPSS 17 and Mplus

Version 7.

  Primary analyses. All primary and secondary analyses were run in Mplus Version 7.

Structural equation modeling (SEM) that employed robust maximum likelihood estimation

(MLR) and maximum likelihood estimation (ML) was used to estimate a longitudinal growth

curve (LGC) with latent variable predictors of the intercept and slope of relationship status,

while accounting for missing data using full-information maximum likelihood (FIML). Latent

growth models analyzed in SEM are actually multilevel (two-level) models with scores clustered

around individuals. This allows the model to account for the likelihood that repeated scores from

the same case are not independent as well as unequal numbers of observations among individuals

because all observations are nested within clusters (i.e. each individual). Like most LGC models,

the model was analyzed in two steps, the first being a change model of just the repeated

measures, the second step then adding variables that may predict change over time (Kline, 2011).

The baseline model of change was fitted first as an unconditional model, with only the intercept

parameters and corresponding variances being estimated. The intercept in this model estimates

the average relationship status at the last wave of data collection instead of the initial status, as

the model was designed to test relationship status outcomes from an initial pool of single

individuals (i.e. the set of loadings for Time 2, Time 3, and Time 4 relationship status were -2, -

1, and 0, respectively). The slope estimates the average rate of change. The variance of the

estimated intercepts and slopes quantify the amount of observed interindividual heterogeneity in

change. This baseline model was then used with all subsequent growth models that were fitted with predictors of the intercept.

Following development of the baseline model, three separate structural models were specified that added variables to predict change over time, each model testing one of the three hypotheses of the study needed to show partial mediation: cumulative relationship history predicting the intercept of relationship status, emotional health predicting the intercept of relationship status, and the mediation model with both predictors. The first two used MLR estimation, while robust maximum likelihood estimation was not available for the bootstrapped mediation model, and thus ML estimation was used in that case.

Secondary analyses. Akaike and Bayesian Information Criterions were used for difference testing of non-equivalent models. Bootstrap analyses were used to test the robustness of results and provide *p*-values for indirect effects (Preacher & Hayes, 2008).

Results

Values of selected fits statistics for the baseline model were good: $\chi^2(1, N = 392) = 1.68$, p=0.19; CFI=1.00; TLI=.99; SRMR=.02; RMSEA=.04). Measurement invariance for gender was established for the relationship status intercept and slope means, variance, and residual variances using Wald testing, although the test approached significance for the intercept (p=.055). The estimated mean of the final relationship status factor is 1.457 and the estimated mean of the slope factor is 0.212, which indicates the average increase in relationship status across measurement periods. The estimated variances of the intercept and slope factors are 0.866 and 0.125, respectively, which are both significant at the 0.001 level. This indicates that young adults are not homogenous in either their final relationship status or the slopes of linear change in relationship status. The estimated covariance between the intercept and slope factors is 0.292

while the corresponding factor correlation is 0.890, significant at the 0.001 level. This indicates that a final relationship status representing more interdependence and commitment predicts higher rates of change in relationship status, and vice versa. This large correlation is expected, given that all individuals were not dating or only casually dating at the initial wave of data collection, leading to slopes either not changing or being positive, but there are no negative slopes. The significant growth in the sample by time 4 (29% in a committed relationship) thereby creates a large correlation between the intercept of final relationship status with the rate of change in relationship status because those with higher intercepts would have the largest slopes of growth.

The Confirmatory Factor Analyses used to construct the latent factors met standards for appropriate factor loadings of indicators, as all loadings were statistically significant at the 0.001 level and the lowest standardized factor loading was 0.364 on an indicator for influence from past relationships. Modification indices were used in the construction of the cumulative relationship history factor, but all modifications were theoretically justifiable given the similarity of measures used as indicators of the influence of past relationships and family of origin factors. Measurement invariance testing using Wald testing of parameter constraints suggested strong measurement invariance for gender, except for the emotional health factor, where only partial measurement invariance was found. Descriptive statistics of measures are presented in Table 2. Zero-order correlations of latent factors calculated from the measurement model are presented in Table 3.

A covariance matrix was analyzed and was positive definite. Model fit was acceptable for the three separate structural models that are required to test for partial mediation. The model with cumulative relationship history fit the data adequately, $\chi^2(84, N = 392) = 156.64$, p<.001;

CFI=.97; TLI=.96; SRMR=.05; RMSEA=.05. The model with emotional health fit the data very well, $\chi^2(10, N = 392) = 8.35$, p=0.60; CFI=1.00; TLI=1.01; SRMR=.02; RMSEA=.00. The mediation model fit the data adequately, $\chi^2(127, N = 392) = 249.92$, p<.001; CFI=.96; TLI=.95; SRMR=.06; RMSEA=.05. Age was included as a control variable, but was not significantly related to any study variables and was excluded from subsequent analyses, which improved model fit.

Focal covariances and regression coefficients for structural paths in the mediation model are given in figure 2. The Pseudo-R^2 for the relationship status intercept was 0.05, p=.12. While this is relatively small in the relationship sciences, it is acceptable because this study provides an initial empirical test of theory upon which future investigations may build.

Hypothesis 1: A positive cumulative relationship history will positively predict the relationship status intercept. This hypothesis was tested using a MLR regression coefficient from the model previously described. This hypothesis was supported, as cumulative relationship history significantly predicted the intercept of relationship status (β=.22, p<.01). Thus, young adults with higher scores on cumulative relationship history have ending levels of relationship status representing more interdependence and commitment, when adjusting for measurement error. A one-unit increase in cumulative relationship history is associated with a final relationship status that is 0.22 standard deviations above the mean value.

Hypothesis 2: High emotional health will positively predict the relationship status intercept. This hypothesis was tested using a MLR regression coefficient from the model previously described. This hypothesis was supported, as emotional health significantly predicted the intercept of relationship status (β=.23, p=.001).

Hypothesis 3: Emotional health will partially mediate the influence of cumulative relationship history on relationship status. In this case, partial mediation means emotional health is a mechanism by which cumulative relationship history influences relationship status, while other mechanisms of influence besides emotional health exist. To test this hypothesis, hypotheses 1 and 2 had to be supported to show a significant relationship between the predictor variables with the outcome independent of each other. In addition, emotional health regressed onto cumulative relationship history had to be significant in the structural equation model, and emotional health had to significantly predict the relationship status intercept. Finally, the structural path between cumulative relationship history and the relationship status intercept would decrease in size, and possibly significance as well.

The hypothesis of partial mediation was supported (see Figure 2). A bootstrapped (5000 draws) indirect effect of emotional health was 0.09 and significant ($p<.05$), explaining 46% of the total effect (see Preacher & Hayes, 2008). The total effect for cumulative relationship history on relationship status was 0.20 in this model. Having these conditions met is statistically consistent with the theoretical proposition that the relation between cumulative relationship history and relationship status is partially mediated through the covariation of cumulative relationship history and emotional health.

Discussion

The process of forming a committed, romantic relationship has been described herein as a developmental phenomenon that cannot be accurately viewed without the context of prior relationship experiences. Such experiences have been argued to influence the development of inter- and intrapersonal capacities that facilitate effectively meeting the tasks of relationship formation, thereby increasing the probability of transitioning through the turning points that

signal increased interdependence and commitment to the relationship. The results support this conclusion, identifying cumulative relationship history and emotional health as positive predictors of relationship status over time. For clarity in presenting the implications of these findings, the discussion will address each hypothesis separately, followed by general statements on clinical implications, limitations, and future directions.

Hypothesis 1

A history of close relationships in family of origin and prior romantic relationships that has a positive influence is associated with increased likelihood of transitioning from being single to being in a romantic relationship over time, with higher levels of perceived positive relationship history being associated with more committed forms of romantic relationships in the given time frame. If the acquisition of "individual" capacities needed to form relationships is justly seen as occurring in relational context (Bronfenbrenner, 1979), then understanding the nature of experiences of self-in-relationship offers the clearest picture of the "relationship school" one has attended and the competencies learned therein. As a cumulative-conditional probability model, the antecedent conditions merely increase the probability of a certain outcome, but do not preclude the emergence of novel capacities when confronting particular novel challenges. Importantly, however, such emergent capacities are viewed as novel integrations of prior obtained capacities, such that the basic "building blocks" must be available for integration, and thus the cumulative relationship history out of which various capacities have been acquired (or not) provides a crucial context.

The tested model operationally defined cumulative relationship history with available measures of self-reported family-of-origin influence, adult attachment styles, and prior relationship influence. Although very little empirical literature has directly tested the impact of

these dimensions of relationship history on committed relationship formation, the findings align with research that has explored their influence in established relationships. Family-of-origin experiences have been shown to relate to marital satisfaction and stability through various mechanisms (Martinson, Holman, Larson, & Jackson, 2010; Hardy, Soloski, Ratcliffe, Anderson, & Willoughby, 2015; Carroll et al., 2006). In harmony with the developmental model proposed, Conger et al. (2000) found that parent-child interactional processes in mid-adolescence are related prospectively to young adult interpersonal skills that affect their romantic relationship quality. Other characteristics of the family environment in adolescence can impact young adult romantic intimacy, such as respect for privacy or flexible family control (Feldman et al., 1998). Thus, it appears the quality of family-of-origin interactions may directly prepare young adults to interact in ways that strengthen the quality of romantic relationships and, as described in this study, affect their very formation.

Family-of-origin experiences are also the relational stage upon which adult attachment styles form, adding an additional role of this developmental context in adult relationship functioning. Family conditions promoting secure attachment in infancy influence social competence in early elementary relationships, which facilitate adolescent relationship security, which in turn predict emotional experiences, collaboration, and conflict resolution in adult romantic relationships (Simpson et al., 2007). The many transactions organized in formative internal working models of self and other, which are carried into subsequent interactions in a representational way (Carlson, Sroufe, & Egeland, 2004), affect early peer and later adolescent relationships. While insecure representations of adult attachment may differ from relationship specific representations (Treboux, Crowell, & Waters, 2004), there is likely an influence of attachment insecurity on initiating and forming committed, interdependent relationships

(McClure & Lydon, 2014; Schindler et al., 2010). Individuals with an anxious attachment style experience increased negative affect and have had fewer positive peer relationships in childhood (Sroufe et al., 2005), decreasing their likelihood of having developed relationship capacities, which would decrease their likelihood of relationship formation. High rejection sensitivity associated with an internal working model of self as unlovable may actually lead to negative behaviors during conflictual discussions and increase the likelihood of breaking up (Downey, Freitas, Michaelis, & Khouri, 1998), while expectations of acceptance in initial social encounters leads to interpersonal warmth, which may help bring that acceptance about (Stinson, Cameron, Wood, Gaucher, & Holmes, 2009). An internal working model of closeness as threatening would predisposes those with an avoidant attachment style to avoid relationship experiences wherein they might develop capacities such as reciprocal goal-exchange, intimacy, and self-disclosure, all components of more interdependent relationships. The internal working model of oneself as desirable or unlovable and of relationships as safe is clearly implicated in each case, giving examples of potential mechanisms of action whereby attachment style may affect romantic relationship formation.

Although the focus of family-of-origin and attachment style influences on peer and adult romantic relationship experience has used the normative case of developing the capacities for satisfactory experiences therein, sadly the opposite may also be true. Harmful family-of-origin environment and insecure adult attachment style may increase the likelihood of negative experiences in young adult romantic relationships, such as sexual assault (Sutton & Simons, 2015) or physical violence (Orcutt, Garcia, & Pickett, 2016). These kinds of experiences may lead to fearful attitudes toward relationships (Harris & Valentiner, 2002), which may in turn lead to avoidance of romantic relationship formation and intimacy. The normative model of

relationship formation supports the conclusion that more experience in romantic relationships increases social support derived therefrom and facilitates mature forms of bonding at later ages (Seiffe-Krenke, 2003). Taken together, it appears that the relationship history of an individual often increases the probability of later romantic relationship experiences of similar valence, as the cumulative-conditional probability would suggest, even while trajectory discrepant outcomes exist (Treboux, Crowell, & Waters, 2004). When prior romantic relationship experiences have been positive, they may contribute to increased likelihood of forming a committed, interdependent relationship leading to marriage just as negative or difficult experiences in romantic relationships may reduce that likelihood, even while the probability of having such negative experiences is increased by a negative relationship history with family and peers.

Hypothesis 2

High emotional health is associated with a higher likelihood of forming a romantic relationship over time. It is probable that poor emotional health disrupts relationship formation in a number of ways, including effects on potential partners and the individual's capacity to engage in interpersonal processes leading to interdependence and commitment. Both sexual strategies theory and attachment theory postulations would direct individuals to look elsewhere for a partner, as poor emotional health would interfere with the raising of offspring (Buss & Schmitt, 1993) and the ability to form a responsive, warm bond (Hazan & Diamond, 2000). Indeed, qualities like interpersonal warmth and low anxiety were rated as the most desirable qualities for long-term romantic relationships cross-culturally for both men and women (Buss, 1989) and people typically report their ideal partner as being low in chronic negative affectivity (Figueredo, Sefcek, & Jones, 2006).

Besides the potential selection effect of poor emotional health by potential partners, poor emotional health affects the psychological resources available for pursuing a relationship and engaging in the tasks of relationship formation. Poor emotional health has significant impacts on self-regulation, or the capacity to set and implement personally relevant goals (Endler & Kocovski, 2000). In the case of romantic relationship formation, poor emotional health may disrupt setting and implementing relationship-oriented goals (Brown, Larson, Harper, & Holman, 2015), which has been associated with marital satisfaction and stability (Hardy et al., 2015).

In one sense, self-regulation deficits associated with poor emotional health may actually just represent auto-regulation of the self-system toward hierarchically more salient goals than relationship formation. For example, even though the individual may hold a goal of dating or marrying, high anxious arousal orients available psychological resources toward fleeing a perceived threat to obtain safety (Barlow, 2002). Because safety is hierarchically prioritized for survival over activation of the affiliation or sexual behavioral systems implicated in romantic relationship formation, the self-system may indeed hold multiple goals competing for psychological resources, but resources will be directed toward meeting the goal of obtaining safety before the goal of relationship formation. In the case of depression, limited mental and physical resources would be available to distribute to the high-stress tasks of navigating relationship transitions in pursuit of romantic attachments as, on the extreme end, depression may cause difficulty in maintaining any kind of relationship (Beach, Sandeen, & O'Leary, 1990). Indeed, a neurodevelopmental model (Perry, 2009) may suggest that the complex interpersonal capacities of the mammalian brain implicated in romantic relationship formation draw on basic regulatory capacities of the reptilian brain that are disrupted in the case of poor emotional health.

Hypothesis 3

The model testing partial mediation of cumulative relationship history by emotional health was supported. Cumulative relationship history predicted a large amount of variance in emotional health, which further predicted final relationship status, while the path from cumulative relationship history to relationship status was only reduced in size, but not eliminated.

Although there are strong, direct influences of poor emotional health on romantic relationship formation, it is important to embed emotional health within a developmental context that accounts for the impact of the environment on the etiology of these symptoms (Sroufe et al., 2005; Vasey & Dadds, 2002). The Social Competencies in Interpersonal Process (SCIP) model (Mallinckrodt 2001) provides one way of understanding the relationship between developmental experiences, acquired social competencies, and emotional health outcomes. In this model, early childhood experiences influence the development of adult social competencies that impact social support and the quality of social relationships, which in turn directly affect psychological and physiological distress as well as buffer the effects of life stressors on such distress. The SCIP model describes social competencies as both skills and dispositions, which can be linked to prior relationship experiences. Basic skills, such as maintaining eye contact or non-verbal attending are used in the service of more complex social skills, such as developing intimacy or resolving conflict. Dispositions are defined as relatively stable trait-like characteristics that govern the acquisition of such skills and their employment in different contexts. Although it is beyond the scope of this paper to review the theory and empirical evidence for this model, select findings may illustrate its use in accounting for the results supporting partial mediation in hypothesis 3.

Attachment style differences have been associated with characteristic affect regulation strategies that affect negative mood and interpersonal problems (Wei, Vogel, Ku, & Zakalik, 2005). Attachment style also influences social competencies that affect social support and psychological distress in patterned ways (Mallinckrodt & Wei, 2005), including a significant influence on depressive symptomology (Cooley, van Buren, & Cole, 2010). The evidence accrued in support of the SCIP model suggests that the social competency deficits associated with one's relationship history have a significant role in emotional health outcomes. As described previously, poor emotional health likely disrupts romantic relationship formation through both partner perception effects and effects from disrupted intrapersonal capacities to self-regulate psychological resources toward interpersonal processes leading to interdependence and commitment. Therefore, hypothesis three suggests that social competency deficits accrued in "relationship school" would have both a direct influence on the likelihood of romantic relationship formation (i.e. explanation supporting hypothesis 1) and an indirect influence through their impact on poor emotional health, which acts as another mechanism of effect.

Corroborating evidence of this simultaneous impact may be found in a study of early relationship formation that showed an influence of attachment anxiety on interpersonal appeal through both overt anxiety symptoms and behavioral mechanisms in communication of the type suggested by the SCIP model (McClure & Lydon, 2014). Understanding the influence of cumulative relationship history on both dispositions and particular relationship skills may refine the understanding of what social competencies are implicated in various phases of attachment formation and by what mechanisms, as with poor emotional health in this study. One example linking parent-child interactions and individual personality traits with adult relationship outcomes points to the mutual influence of dispositions and skills acquired in previous

relationships on marital competence (Donnellan et al., 2005). This evidence supports a view of cumulative relationship history as having both distal and proximal effects on important romantic relationship outcomes and suggests the merit of continuing to test such models in relationship formation research.

Clinical Implications

While perhaps the most important implications are those that are preventative, the focus of clinical recommendations will be remedial, oriented toward the young adult facing the task of relationship formation. Furthermore, these recommendations are best understood in terms of the conditional probability model described previously and the effect sizes of these results. In other words, there are many other important influences on romantic relationship formation that are not addressed by these recommendations and strict adherence to the sample intervention would not result in a definite outcome of relationship formation in any given case, but relates to a general increase in the probability thereof, based on the findings from this sample.

The therapeutic concept of "coming to terms" with family-of-origin experiences may be of value in improving marital satisfaction (Martinson et al., 2010; Dagley, Sandberg, Busby, & Larson, 2012) and is indicated herein for improving relationship formation. Differentiation from the family-of-origin (McGoldrick & Carter, 2001) may be necessary to form new attachments. For some young adults in enmeshed family systems, dating or romantic relationships may be treated as a threat to family relationships, sometimes even explicitly (e.g. "Oh, you can't go off and get married yet, we still need your help at home."). Alternatively, those who have cut off completely from their family-of-origin may be in a reactive stance that indeed reduces emotional response to family-of-origin issues, but also disallows reflection and mentalization of family-of-origin system influences on their beliefs, behaviors, and emotions that could be disrupting

romantic relationship formation (e.g. "relationships are chaotic and emotionally dangerous" or "marriage means you're trapped with someone who treats you poorly, just like my dad and mom."). Completion of a genogram (McGoldrick & Carter, 2001) focused on relationship patterns and social competencies can begin to elucidate the need for and facilitate the process of differentiation from the family-of-origin toward healthy romantic attachment. Other approaches to treating family-of-origin problems have been developed that can address the beliefs, behaviors, and emotions that could be disrupting romantic relationship formation (e.g. Bedrosian & Bozicas, 1994). Furthermore, the differentiation-of-self facilitated by these approaches may lead to improved emotional health and interpersonal functioning in young adulthood (Skowron, Stanley, & Shapiro, 2009).

Insofar as an anxious attachment style disrupts romantic relationship formation, psychotherapy is indicated. A meta-analysis on changes in adult attachment representations following psychotherapy suggests change in attachment anxiety is possible (Taylor, Rietzschel, Danquah, & Berry, 2015). One example of an intervention targeting this kind of change may be seen in Marmarosh and Tosca's (2013) group therapy for attachment anxiety. The interpersonal nature of group therapy may provide an excellent context to encounter and develop the social skills and dispositions that facilitate relationship formation in a romantic context. In suitable conditions, direct intervention with the family-of-origin can provide a similar interpersonal context to encounter and develop those same social skills and dispositions, while addressing and potentially resolving the relational injuries related to attachment anxiety (Diamond, Diamond, & Levy, 2014).

While the accrued evidence was generally favorable in the case of attachment anxiety, the effect of psychotherapy in changing attachment avoidance is less clear (Taylor et al., 2015). One

potential clinical recommendation surfacing from this finding is describing attachment avoidance as adaptive in certain contexts (Belsky et al., 1991), but is not congruent with marital competence, i.e. "the set of behaviors that enable an individual to form an enduring romantic union that is mutually satisfying to both partners" (Donnellan et al., 2005, p. 563). From the SCIP model, the focus of change would be the disposition toward independence and the internal working models that govern a defensive stance in close relationships, as this disposition will direct the individual away from relationship experiences wherein they might develop capacities such as reciprocal goal-exchange, intimacy, and self-disclosure, all components of more interdependent relationships. Once the disposition toward such skill development is cultivated (i.e. "it is safe for me to trust certain people now and be close to them, even though it might not have been in the past"), individual, family and group psychotherapy may again provide a safe relational context to practice new behaviors and explore automatic emotional responses to being close. The process for these individuals represents much more than just a cognitive endeavor: the intervention process would ask them to change their fundamental world view of self and others at a procedural level of memory.

Although not addressed previously, the clinical recommendations in the case of disorganized attachment may be mentioned. Unresolved or disorganized patterns of attachment representations may result from interpersonal trauma that has led to dissociation of behavioral systems regulating psychological safety and attachment, such that the self-system is dissociatively "torn" between phobia of attachment and of attachment loss (van der Hart, Nijenhuis, & Steele, 2006). Integration of both parts of the personality may allow the self-system to form a romantic relationship, but to do so in a safe way. Often, the dissociation of these psychological systems can result in extreme fluctuations between indiscriminant (and often

dangerous) romantic attachments because the self-protective system that vets potential partners for characteristics of untrustworthy behavior is not involved, while on the other extreme the self-protective system may phobically avoid all attachments as potentially dangerous, lacking the differentiation of stimuli that is possible from synthesis of traumatic information (e.g. "A romantic attachment to this person is like the attachment relationship within which I was abused as a child, *but* is different because this person respects my boundaries and treats me kindly.") See van der Hart et al. (2006) for a more thorough explanation of clinical intervention with this population.

Recommendations regarding prior relationship influence are two-fold. First, development of social competencies within available peer and potential romantic relationships is indicated. Skills, such as resolving conflicts collaboratively, identifying emotional experiences, and self-disclosure, and dispositions, such as authenticity and other-centeredness, may all be used in interdependent relationships that are not romantic in nature, but provide developmental antecedents to their employment in a romantic context. Indeed, psychotherapy has been shown to bring about improvements in self-reported romantic competence among emerging adults while reducing emotional health symptoms (Atzil-Slonim, Reshef, Berman, Peri, & Shulman, 2015). Furthermore, while individual, family and group psychotherapy may provide an excellent context to experiment with new behaviors and receive honest feedback, the natural systems within which individuals are embedded (e.g. friends, family, co-workers) may provide the relationships needed for dispositionally inclined individuals to learn and practice the skills of healthy relationships.

The other branch of recommendations in this area is to directly address the influence that negative experiences in past relationships have on relationship specific cognitions, affect, and

behaviors. In practice, this may be similar to the "coming to terms" recommendations with family-of-origin experiences, focusing on processing the negative experiences that lead to emotional distress, behavioral avoidance or fearful attitudes. All too often, negative experiences are "put to the side" psychologically as individuals try to move forward in a positive direction. If done prematurely, however, this may result in information being stored in memory that is not adaptive for the individual. Psychotherapy may be one way of identifying the stored information that poses a barrier to relationship formation and processing it to an adaptive resolution (e.g. "I am lovable and safe to be emotionally vulnerable with certain people, even though my prior experience reminds me that not everyone will love me and not everyone is safe to be vulnerable with"). Examples of therapeutic approaches oriented toward this kind of processing are Eye Movement Desensitization and Reprocessing Therapy (Shapiro, 2001) or Internal Family Systems Therapy (Schwartz, 1995). Once these barriers have been addressed, it more likely the individual will engage in the first branch of recommendations, having experiences in a positive "relationship school" that allow the development of social competencies.

Recommendations regarding the area of emotional health are simple: get help. Powerful psychotherapeutic interventions have been developed that can provide tools for anxiety and depression. According to the theoretical model proposed, when emotional health improves, the individual will have psychological resources available to invest in the tasks of relationship formation, plus increase their attractiveness to potential partners because of an increased ability to socially engage and be warm. While in a depressed state, one could take this as yet another reason to believe they are broken and hopeless, without efficacy to bring about a change. It is just the opposite! The recommendation says there is something within their power and it starts completely with them choosing to reach out for help. Because the question isn't "Will therapy

work for me?," but is "Will I do the work of therapy?," accessing the many available, effective treatments is a clear recommendation (e.g. Diamond et al., 2014). In one way, the recommendation could be said, "Find a therapist who will help you get healthy enough to be in a healthy relationship."

Recommendations for social competencies are similarly simple: Learn them. If one lacks the disposition to do so, that may be addressed in the previous sections influencing interpersonal dispositions. Individual, family, and group psychotherapy may provide information on skill development and a context to practice it with honest feedback. Relationship education programs, such as the Prevention and Relationship Enhancement Program (Stanley, Markman, & Blumberg, 1999) or Relationship Enhancement (Cavedo & Guerney, 1999) teach skills like effective negotiation and emotional self-disclosure that strengthen marital competence. For those with a cumulative relationship history that is lacking in models of healthy romantic relationships, these programs provide a valuable template and specific skills that can help in achieving the relational outcomes desired. A helpful mindset for this recommendation is: "Your disposition has a bigger influence than your skills because it can take you down the path to learn them."

If combined, this intervention represents a tremendous amount of personal effort as well as investment of resources. These barriers may limit the reach of appropriate intervention for far too many individuals who merit such help. Because of this, the more important clinical recommendation is a plea to government and social organizations to focus on prevention more than remediation. Giving every possible support to the natural social systems within which children develop can increase the number of healthy attachment experiences that provide the foundation for facilitating the formation of adult romantic relationships that are healthy and

stable, thereby providing the same positive relational environment to the potential offspring of that union. When viewed in terms of an intergenerational transmission of marital competence or divorce (Sroufe & McIntosh, 2011), our attention and resources are rightly given to supporting healthy marriages and families out of which the next generation will develop. If providing high quality resources on healthy parent-child and romantic relationships is not given a priority in our society, far too many young adults will be facing the task of marriage formation without the developmental foundation to successfully navigate it nor the resources to shore up the cracks in their relational capacities.

Limitations and Future Directions

This study was limited by the relative lack of diversity in the sample in terms of race, age, SES, and religion, significantly limiting its generalizability to the U.S. population. A comparison to efficacy and effectiveness research may be drawn, where high homogeneity in the sample that facilitates isolating treatment effects comes at the cost of generalizability gained through high heterogeneity. This highly homogenous sample within a marriage-oriented sub-culture of the U.S. offers an initial test of hypotheses that may now merit replication and refinement in more heterogeneous samples.

The high rate of attrition is another limitation that could have biased estimates, as the missing data was not found to be missing completely at random. High attrition caused a premature termination to gathering data, which then precluded testing for a quadratic growth curve. Although not the hypothesized growth pattern, quadratic growth in relationship status is possible and has not been tested. Future longitudinal research with this transitory population may benefit from using incentives shown to increase retention of young adults, as well as more intentional branding of the study to increase commitment to participation. Additionally, reducing

the burden of participation may be required at later waves of data collection, as attrition was shown to increase with each wave.

Future research that includes a more diverse sample may need to increase efforts at retention even while extending the length of longitudinal data collection to account for diverse dating cultures where relationship development proceeds at a slower rate than in the sub-culture selected for this study. Alternatively, an accelerated longitudinal design (or cohort-sequential design) may allow modeling of a growth curve without following the complete sequence of single to married or cohabiting because individuals across the measurement range of relationship status are included in the sample at time 1 and followed longitudinally (Duncan, Duncan, & Hops, 1996). Future research should also include more precise, behavioral relationship status definitions to reduce the potential of participants interpreting relationship statuses, such as "casually dating" or "committed dating," in an idiosyncratic way that increases measurement error.

Other domains of marital competence should be included in future studies predicting romantic relationship formation, such as interpersonal capacities of problem-solving or self-disclosure. This will help clarify if marital competence is primarily related to the quality and stability of relationships once they are formed or if, as suggested by this study, they also affect relationship formation. For example, self-reported maturity/impulsiveness has been associated with perceived capacity for intimacy in romantic relationships (Mayseless & Scharf, 2007) and may be tested for an empirical association with actual relationship formation. This may also be tested as a "dispositional" quality as compared to a skill deficit in the SCIP model. More fine grained analysis of the social competency deficits associated with different attachment styles and family-of-origin experiences could provide precise information for prevention and intervention,

perhaps eventually allowing a type of index of the competencies for relationship formation for use in prevention and intervention programs.

The relatively small amount of predicted variance in the relationship status intercept represents an important challenge for future research. A number of factors may be responsible. First, the operational definition of cumulative relationship history underrepresents the conceptual definition as defined theoretically. In this area, it falls to established, longitudinal research programs with more robust measures of relationship history in family, peer, and prior romantic relationships to replicate and expand these findings. A second factor responsible for the difficulty in predicting variance in romantic relationship statuses is that people form romantic interdependent relationships for many reasons besides the straightforward reasons of having a prototypical "happy" romance. Other behavioral systems, such as the sexual or care-giving systems, enter the foray in various idiosyncratic levels of priority. Someone may tolerate an unsupportive, aloof or jealous, clingy partner for the benefits obtained, such as social status or physical beauty in the partner (Brumbaugh, Baren, & Agishtein, 2014). In this way, qualities of attachment security and marital competence may be better viewed as only some resources available for exchange, but not *necessarily* the primary ones, especially in practice (Eastwick & Finkel, 2008). Furthermore, attachment styles are, as Ainsworth noted (1991), only one aspect of adult pair-bonds and do not determine acquisition (or not) of many other positive qualities that attract partners. While men and women with a state of mind with regard to attachment do appear to be married to each other more often than would be expected by chance, the effect size is modest, suggesting that many insecure individuals marry partners who are secure (van IJzendoorn & Bakermans-Kranenburg, 1996). Furthermore, many marriages and other committed forms of romantic relationships do occur between insecure partners (Kirkpatrick &

Davis, 1994), and many people with limited marital competence form romantic relationships with high levels of interdependence, albeit with lower levels of satisfaction and stability (Mikulincer, Florian, Cowan, & Cowan, 2002). If anything, this factor points to the nearly universal draw to be in a pair-bond, even after predominantly negative experiences; for almost everyone, the combination of the hope that "this next one will be different somehow" and their own expectations of what they deserve in a relationship lead to repeated exposure to the challenges of finding and forming a satisfactory (enough) relationship. A final factor complicating the prediction of relationship status variance is the seemingly "chance" nature of the encounters that lead to committed bonding. Many socially competent, emotionally healthy adults do not form the interdependent relationships they desire, contrary to predictions of the theoretical model. Empirical research on this outcome is in its infancy and the models will likely need a high degree of complexity to account for the many systems that influence it.

All in all, these challenges are not reason to abandon prospective study of romantic relationship formation, but should encourage analysis of various growth trajectories and seek to pair partner data, when feasible, to account for the dyadic nature of interdependent relationships. More sensitive class analysis could also help differentiate if cumulative relationship history and emotional health predict those who enter and exit many short-term romantic relationships and those who "churn" (Halpern-Meekin et al., 2012), from those who are on a trajectory of establishing and maintaining a long-term, secure pair-bond, as might be predicted from reproductive strategies theory (Belsky et al., 1991) and this model of capacities of marital competence. This could also improve predictive power in the outcome variable because the variance would not be confounded by those who are indeed forming relationships, but not of the quality or duration expected of those who have greater marital competence. Furthermore,

tracking the longitudinal outcomes (i.e. quality and stability) of these various relationships would provide valuable insight for those seeking to understand the complex process of forming a high-quality, committed, romantic relationship like marriage, while also helping to clarify the relationship between those individuals who never marry and their marital competence (Settersten & Ray, 2010).

Conclusion

This study contributes to the basic scientific understanding of pathways to marriage by identifying dynamic, psychological factors that promote the likelihood of transitioning into committed, romantic relationships. A personal history of healthy relationships that have a positive effect on an individual increases the likelihood of forming a committed, romantic relationship while also contributing to good emotional health. Poor emotional health has a separate, negative impact on the likelihood of forming a committed, romantic relationship, and is largely affected by a negative influence from prior relationships. Supporting the development of social competencies within marriage, family, peer, and romantic relationships may contribute to the next generation navigating the task of marriage formation successfully and obtaining the personal and societal good that comes from a thriving marriage culture.

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Appendices

Table 1.

Romantic relationship status by wave of data collection

	Frequency	%	Valid %
Time 1			
Not dating	92	23.5	23.5
Casual/Occasional dating	300	76.5	76.5
Total	392	100.0	100.0
Time 2			
Not Dating	57	14.5	15.5
Casual/Occasional dating	251	64.0	68.2
Committed dating	54	13.8	14.7
Engaged	6	1.5	1.6
Married	0	0.0	0.0
Total	368	93.9	100.0
Missing	24	6.1	-
Time 3			
Not Dating	27	6.9	10.6
Casual/Occasional dating	151	38.5	59.4
Committed dating	55	14.0	21.7
Engaged	18	4.6	7.1
Married	3	0.8	1.2
Total	254	64.8	100.0
Missing	138	35.2	-
Time 4			
Not dating	22	5.6	10.3
Casual/Occasional	131	33.4	61.2
Committed dating	30	7.7	14.0
Engaged	15	3.8	7.0
Married	16	4.1	7.5
Total	214	54.6	100.0
Missing	178	45.4	-

Note: Categories are 1. Not dating at all 2. Casual/Occasional dating 3. Committed dating one person/friends with one person with whom they would be answering about their "partner" on the RELATE 4. Engaged or committed to marry and 5. Married.

Table 2.

Descriptive statistics of study variables

Variable	M	SD
Avoidant Attachment	4.66	(1.05)
Anxious Attachment	4.50	(0.97)
Happiness	3.28	(0.60)
Calmness	3.86	(0.61)
Self-esteem	4.30	(0.58)

Note: $N = 392$.

Table 3.

Correlations for study variables

	1	2	3
1. Rel. Stat. Inter.	---		
2. Rel. Stat. Slope	.930***	---	
3. Cum. Rel. Hist	.208*	.104	---
4. Emotional health	.222**	.090	.634***

Notes: $N = 392$. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4.

Confirmatory Factor Analysis (CFA) indicators and factor scores

CFA Model	Constructs in Model	Indicator	Latent Factor Score
1	Influence of family of origin	There are matters from family experience that are still hard to deal with	.919
		Matters that negatively affect ability to form close relationships	.776
		Feel at peace about negative occurrences in family growing up	.768
2	Influence of past romantic relationships	Relationships are safe, secure, rewarding, worth being in and source of comfort	.746
		Relationships are confusing, unfair, anxiety-provoking, inconsistent, and unpredictable	.757
		Feel at peace about negative occurrences in past relationships	.364
3	Anxious Attachment	Parcel 1	.898
		Parcel 2	.797
		Parcel 3	.789
4	Avoidant Attachment	Parcel 1	.792
		Parcel 2	.869
		Parcel 3	.794
5	Emotional health	Happiness	.846
		Self-esteem	.739
		Calmness	.589

Note: *N* = 392.

Figure 2.

Partial mediation structural model
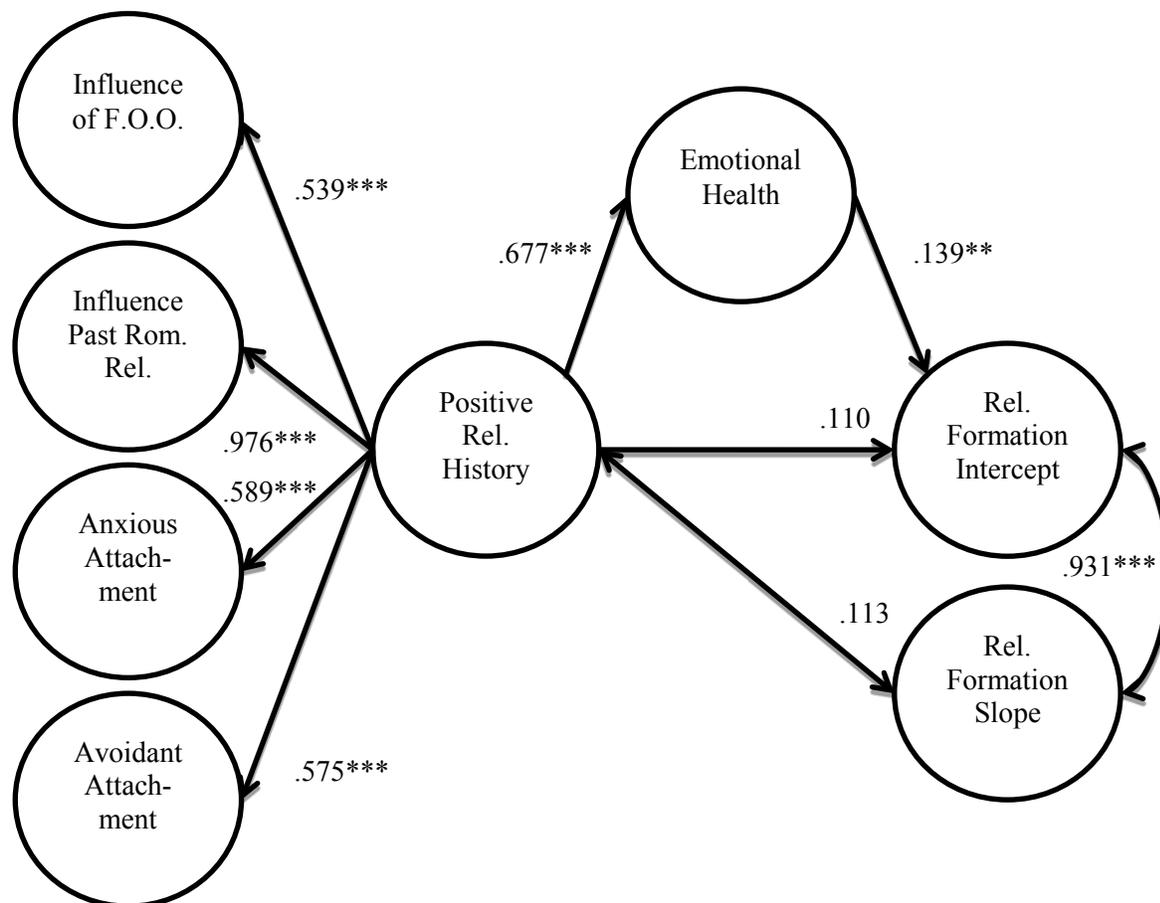
Notes: STDYX Standardized coefficients; *p<.05, **p<.01, ***p<.001; A bootstrapped indirect effect of emotional health was 0.09 and significant (p<.05), explaining 46% of the total effect of cumulative relationship history on relationship status.