An Examination of the Effects of Family Stability on Intimate Relationships

By

Jacob M. DiLorio

Submitted in partial fulfillment
of the requirements for
Honors in the Department of Psychology

UNION COLLEGE
June, 2023
A large focus of research on the influences of the family on child adjustment has been on the relationship between the stability of the home environment while growing up and the psychological and emotional outcomes of children, adolescents, and adults. Overall, this research suggests that homes high in stability are more beneficial for children. The purpose of the present study is to expand on this body of research by examining the relationships between aspects of family stability while growing up and relationship satisfaction and intimacy in emerging adulthood. To accomplish this, 152 participants, aged 18 to 25 years, who endorsed being in intimate relationships at the time of the study were recruited through Prolific, an online survey platform. Participants were asked to anonymously complete a survey measuring two related but distinct constructs of family stability, namely the regularity of daily family activities and routines (termed molecular family stability) and major family life changes (termed global family stability), and to report on their current relationship satisfaction and perceived emotional intimacy. Findings supported an association between molecular family stability and global family stability, whereby greater regularity of daily activities and routines (greater molecular family stability) was associated with fewer major family life changes (greater global family stability). Moreover, relationship satisfaction and perceived emotional intimacy were positively correlated with each other, with greater relationship satisfaction associated with greater emotional intimacy. Contrary to expectations, neither aspect of family stability during childhood was significantly correlated with relationship satisfaction or perceived emotional intimacy. Moreover, although
hypothesized that molecular family stability may play a protective role in the relationships between global family stability and relationship satisfaction and intimacy, the present study did not support those models. These findings can help provide direction for future research.
Family Stability and Intimate Relationships

Results 33
Preliminary Analyses 33
Descriptive Statistics 34

Regression Analysis of the Proposed Moderation Models 34

Global Family Stability, Molecular Family Stability, and Relationship Satisfaction 35


Discussion 36

References 46

Tables 54

Figures 58
Various studies have identified the stability of one's home life, especially at younger ages, as an essential factor in one's psychological development (Gervai, 2009; Bowlby, 1979). A broad literature has emerged that links early family life experiences with a variety of outcomes. One area that has been extensively researched is how one's family life affects an individual’s ability to navigate future intimate relationships (Keelan et al., 1998). Intimate relationships have been defined broadly in the literature by high levels of disclosure, emotional support, care, and understanding (Murray & Hazelwood, 2011; Wardecker et al., 2015; Whisman & Baucom, 2012). Various aspects of family life have been examined in an attempt to understand those factors that contribute to the formation of healthy intimate relationships and those that put people at risk for difficulties in their intimate relationships. Pinpointing these factors will add to our understanding of psychological development in youth and adulthood and enhance opportunities for intervention. The present study was intended to help expand our understanding of the relationship between family contextual influences and intimate relationships, with specific focus on understanding the ways in which aspects of family stability relate to relationship satisfaction and intimacy.

While a thorough review of the literature examining early family life and its impact on later intimate relationships is beyond the scope of this paper, an effort will be made to first present some related research that helps form the basis for the current conceptualization and related research study. We begin by discussing some relevant research that, while not all examined in the present study, provides conceptual background for why the study of early family life experiences is so central to understanding later relationship adjustment.
Family Environment and Interpersonal Functioning

Previous research regarding intimate relationships has found that individuals that have developed interpersonal skills such as assertiveness, positive engagement, and effective communication are more successful in developing and maintaining successful intimate relationships (Tyrell et al., 2016; Xia et al., 2019). Furthermore, research also suggests a positive family environment, which includes parenting practices such as acceptance, inductive reasoning, consistent and fair discipline, and limit setting, may be important to the development of interpersonal skills that are positively correlated with future intimate relationship outcomes (Tyrell et al., 2016; Xia et al., 2019). Additionally, evidence suggests that individuals who experience a positive family environment, along with competent parenting, including, nurturing, protective, and educational behaviors often develop these interpersonal skills more effectively than their counterparts (Tyrell et al., 2016; Xia et al., 2019). Together these findings suggest a positive and consistent family environment, supported by positive parenting practices, may be related to the development of interpersonal skills that may be important for the development of healthy intimate relationships.

Conceptually, these findings are supported by two models that relate to the formation of interpersonal skills and how they translate to satisfying and intimate relationships. The first model, the development of early adult romantic relationships model, proposes that the quality of early family relationships serves as a distinct pathway to the development of interpersonal skills during adolescence which have been correlated with later functioning in young adult romantic relationships (Bryant & Conger, 2002; Raby et al., 2015). Additionally, the enduring family influence perspective posits that early family relationships may have a lasting effect on how individuals approach interpersonal interactions in their romantic relationships (Bryant & Conger,
Family Stability and Intimate Relationships

2002; Raby et al., 2015). This model proposes that having good early family relationships may lead to the development of interpersonal skills at a young age, which may translate to the functioning of satisfying intimate relationships in later years (Bryant & Conger, 2002; Raby et al., 2015). In summary, these models suggest that individuals that are able to form good relationships with their family members earlier in life may form better interpersonal skills, which, in turn, may translate to more satisfying future intimate relationships (Bryant & Conger, 2002; Raby et al., 2015). While not the focus of the present study, these models lend support for the influential role the family environment and early family life experiences may play in the development of skills important for the development of later intimate relationships.

Attachment Styles and Intimate Relationships

A large portion of the literature that examines the effect of early life experiences on future intimate relationships focuses on attachment theory, or on understanding the ways in which the formation of early relationship bonds between children and their caregivers shape how children approach intimate relationships as adults later in life (Bowlby, 1982). Early relationships and interactions with parents and caregivers have been shown to produce either secure or insecure attachment styles in children, and research suggests these attachment styles often continue into adulthood, impacting later intimate relationships (Ainsworth, 1982; Bowlby, 1982). Secure attachment styles are likely to be formed when caregivers respond quickly, consistently, and with high levels of warmth to their children's needs, while insecure attachment may be formed when caregivers are not attentive or are inconsistent in their responses to their child's needs (Ainsworth, 1982; Bowlby, 1982; Waters et al., 2000). These early experiences with relationships may cause children to form expectations and beliefs about how relationships should work (Ainsworth, 1982; Bowlby, 1982). For example, in a study done by Hazan and Shaver
(1987), it was found that individuals with insecure attachment styles show higher levels of jealousy, lower levels of trust, and higher divorce rates than their securely attached counterparts. Additionally, attachment may play a role in the longevity of intimate relationships, as Hazan and Shaver (1987) also found that intimate relationships for insecurely attached individuals lasted half as long on average when compared to relationships of securely attached individuals. Other research has suggested that attachment styles are relatively stable over time, with approximately 70% of individuals reporting the same attachment style over the course of multiple years (Baldwin & Fehr, 1995; Davila et al., 1997; Kirkpatrick & Hazan, 1994). For the 30% of individuals that change attachment styles, research suggests interpersonal conflicts, major life changes, and history of psychopathology may influence changes in attachment styles, with most changes being from secure to insecure attachment styles (Baldwin & Fehr, 1995; Davila et al., 1997; Kirkpatrick & Hazan, 1994; Sharfe & Bartholomew, 1994). These findings suggest that individuals who are parented inconsistently, and with low levels of sensitivity and warmth, may form negative beliefs and expectations around future intimate relationships, potentially leading to lower levels of relationship satisfaction and quality (Hazan & Shaver, 1987). Conversely, it is possible that individuals that are parented with consistency and sensitivity may form positive beliefs and expectations around intimate relationships, leading to more successful relationship outcomes (Hazan & Shaver, 1987). Therefore, children coming from homes that are consistent and stable may be more likely to have successful and satisfying future intimate relationships.

**Distal Effects on the Family Environment and Relationship Quality**

While attachment theory provides one context to explain the relationship between early life experiences and future intimate relationships, there are other distinct constructs that may present additional information about how early life experiences may affect future intimate
relationships. The purpose of this section is to give insight into the relationships between similar yet distinct constructs that examine the effects of distal family life events, including parental divorce, death of a parent and other major family life changes and intimate relationship quality. Such events are conceptualized as distal family changes because, while highly salient, they are often further from the day-to-day experience of family members and often uncontrollable in nature. The following sections will define each construct, situate them in previous research, and explain their possible relationships to future relationship satisfaction and intimacy.

**Parental Divorce and Relationship Outcomes**

Parental divorce has the potential to be destabilizing to the family environment, as it may place large amounts of stress on both parents and children (Fagan & Churchill, 2013; Jacquet & Surra, 2001). The effects of divorce on the stability of the home are explained well through the lens of “stress theory,” which hypothesizes that a change in either parent's romantic or marital status introduces stress into the life of the parent through multiple different modes, which in turn, may negatively affect their parenting (Teachman, 2003; Wu & Martinson, 1993). Stress theory states that stress passed down through negative parenting practices (parenting low in warmth and understanding) may have negative effects on children, as it has the potential to disrupt children's security, and stability, as well as the consistency of routines in the household (Teachman, 2003; Wu & Martinson, 1993). In addition to the disruptions in security and stability, it has also been found that children of divorce may also face additional disruptions through the many consequences of divorce, whether it be moving, changing schools, having to make new friends, or adjusting to a new presence in the home (Cavanagh & Huston, 2008; Teachman, 2003; Wu & Martinson, 1993).
These disruptions to the stability and security of the home life that accompany divorce may have many adverse effects on the children experiencing them, with past research pointing to risk for maladaptive behaviors, such as poor emotional regulation, and negative internalizing and externalizing behaviors (Fagan & Churchill, 2013; Jacquet & Surra, 2001). Examples of externalizing behaviors include delinquency, violence, and poor socialization, while examples of internalizing behaviors include depression, fear, and anxiety. Each of these areas of problems in adjustment during childhood have been shown to be associated with poorer future relationship satisfaction, intimacy, and success (Bocknek et al., 2014; Forman & Davies, 2003).

Along with the stress caused by divorce, parental divorce has also been shown to contribute to negative attitudes toward future intimate relationships in children of divorce (Fagan & Churchill, 2013; Jacquet & Surra, 2001). In fact, Fagan and Churchill (2013) found that young adults previously affected by divorce that were currently in romantic relationships reported lower scores on measures of trust and relationship satisfaction compared to individuals whose parents had not been divorced (Cui & Fincham, 2010; Fagan & Churchill, 2013; Jacquet & Surra, 2001).

In addition to having more negative attitudes toward romantic relationships, research has found that children of divorce may have an increased likelihood of developing an insecure attachment style to partners in adulthood and may be more likely to experience divorce and other disruptions in their adult relationships (Crowell et al., 2009). Past research and theory suggest that the development of insecure attachment styles in children of divorce may result from observing insecure attachment styles in their parents' relationships or more directly via a shift of the child’s attachment style with their parent as a result of the divorce (Baldwin & Fehr, 1995; Crowell et al., 2009; Cui & Fincham, 2010; Davila et al., 1997; Fagan & Churchill, 2013; Jacquet & Surra, 2001; Kirkpatrick & Hazan, 1994; Sharfe & Bartholomew, 1994). For example,
the observational learning perspective is supported by research suggesting that parents who demonstrate insecure attachment styles in their relationships with their intimate partners may also be emotionally limited in their interactions with their children; this may lead to the learning and development of insecure attachment styles in their children that persist into adulthood (Jang, 1998; Jung, 2000; Mcnelis & Segrin, 2019). Other research suggests that major life changes, such as divorce, within a family may alter the parent-child attachment. For example, Davila and colleagues (1997), found that individuals who experienced adverse early life experiences were more prone to shifting from secure to insecure attachment in adulthood. Therefore, it is possible that individuals who experience major life changes may experience a shift in the parent-child relationship, in particular in their attachment, which may negatively impact their intimate relationships in early adulthood. Taken together, experiencing a major life change such as divorce during childhood may influence attachment formation during childhood, which may extend into relationships in adulthood.

Parental divorce is just one of many major life changes that have been suggested to negatively affect a person’s future relationship satisfaction and intimacy. Therefore, it is possible that individuals who experience other major disruptions to their family life may also experience negative outcomes relating to attachment styles, future psychopathology, and future adjustment, all of which are suggested to have negative effects on intimate relationship satisfaction.

**Parental Death and Relationship Outcomes**

Parental death, much like parental divorce, is a significant life event that has been found to be potentially destabilizing to the home environment, as it places large amounts of stress on widows, widowers, or bereaved guardians and the children they are caring for (Cerniglia et al., 2014; Dopp & Cain, 2012). While there are of course unique stressors and loss associated with
parental death, similar to parental divorce, stress caused by parental death has the potential to disrupt the stability and security of home life for both the child and their guardian, possibly leading to a multitude of negative outcomes. For example, in a study done by Guzzo and Gobbi (2021), it was found that the instability in the home due to the death of a parent may predispose children to develop many internalizing and externalizing behaviors such as mood disorders, anxiety, and addictions, all of which have been associated with negative future relationship outcomes (Brewer & Sparkes, 2011; Guzzo & Gobbi, 2021).

The effects of parental bereavement may also stretch further than the immediate effects of that single life event, as families that experience bereavement may also experience additional destabilizing events such as relocation, changing schools, and additional family life changes (Brewer & Sparkes, 2011; Guzzo & Gobbi, 2021). Additionally, it has been suggested that children who experience additional destabilizing events beyond parental death may also be more likely to develop internalizing and externalizing behaviors (Brewer & Sparkes, 2011; Guzzo & Gobbi, 2021). Adjustment difficulties may, in turn, put young people at risk for difficulties in multiple domains, including intimate relationships. For example, in a study conducted by Nelson and colleagues (2007), it was found that participants that reported high levels of internalizing behaviors were more likely to have poor relationships with their parents, friends, and romantic partners. Additionally, in a study done by Rholes and colleagues (2016), it was found that participants who were rated as high in externalizing behaviors were more likely to subject their romantic partner to abuse and aggression. Judging from these findings, the experience of significant family life changes, such as parental death, may present a salient risk factor for adjustment difficulties, including those of both internalizing and externalizing natures, which
may predispose individuals who have experienced parental loss to more difficulties in later relationship quality.

Additionally, as described earlier, previous research has also found that deaths in the family, especially the death of a parent, have the potential to alter children's perceptions of intimacy in relationships (Cerniglia et al., 2014; Dopp & Cain, 2012). This research suggests that parental death may be related to negative perceptions of intimacy in relationships, along with discomfort in intimate interactions and increased feelings of inferiority and inadequacy, all of which may negatively impact later relationship satisfaction and intimacy (Cerniglia et al., 2014; Dopp & Cain, 2012). These findings may be bolstered by previous research that examines the effects of parental bereavement on attachment style, which has found that individuals who report having insecure attachment styles are more likely to report the loss of one or both parents (Sochos & Aleem, 2022). Additionally, research suggests that individuals with insecure attachment styles are less likely to be in romantic relationships, and, those that are, often experience less satisfying intimate relationships when compared to their securely attached counterparts (Gleeson & Fitzgerald, 2014; Hilla, 2010).

Overall, these findings suggest that, much like children who experience divorce, children who have experienced the death of a parent may experience multiple risk factors, including increased risk for internalizing and externalizing behaviors, altered perceptions of intimacy, and insecure attachment styles, all of which have been linked to poor relationship satisfaction in adulthood (Baldwin & Fehr, 1995; Cerniglia et al., 2014; Cui & Fincham, 2010; Davila et al., 1997; Dopp & Cain, 2012; Fagan & Churchill, 2013; Jacquet & Surra, 2001). With these findings in mind, we turn next to exploring a related but broader construct of global family stability.
Global Family Stability

While the literature on parental divorce and parental death help us understand the ways in which major family life changes may impact the stability of the family environment, adjustment and later intimate relationships, these constructs each represent a singular major life event and, as such, do not take into account both the multiple types of major family life changes a young person might experience nor the cascade of change that, in some cases, may follow one singular major life event. The construct of global family stability, which will be a focus of the present study, was first introduced by Israel and colleagues (2002) and builds upon a body of research examining the ways in which major family life changes and changes in family structure impact development and adjustment and the ways in which major family life changes may set in motion a series of changes that impact more proximal aspects of family life.

The stability of one's family environment has long been identified as integral to many different aspects of psychological and physical well-being (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012). The work of Israel and colleagues has delineated two aspects of the construct of family stability, with the first being global family stability (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012). Global family stability refers to the frequency of major life events such as residential moves, parental illness or death, parental divorce, or change in parental employment, for example (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012). This aspect of family stability is termed global because it is thought to more distally impact the child’s daily life and is often less controllable by family members (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012). For example, while a change in parental employment likely impacts the family system and the child, the impact may be more indirect (e.g., via change in the parent’s work schedule or financial resources), and such a change may be
out of the parent’s control (e.g., dependent on promotion opportunities, layoffs). Families that
have experienced more major family life changes are considered to have lower levels of global
family stability, whereas more stable global family stability is defined by fewer major family life
changes.

Global family stability has been associated with various outcomes, with more family life
changes related to negative outcomes in various domains of adjustment (Israel et al., 2006;
Malatras et al., 2012; Malatras & Israel, 2012). For example, greater family life changes (lower
global family stability) have been associated with poorer outcomes in psychological adjustment
(Israel et al., 2006; Malatras & Israel, 2012). Additionally, in a study done by Malatras and
colleagues (2012), it was found that individuals that had experienced a greater number of family
life changes reported poorer sleep quality, along with greater levels of daytime dysfunction.
Changes to global family stability also often affect more proximal aspects of family life,
including the regularity of daily family activities and routines, a construct Israel and colleagues
have termed molecular family stability, which we turn to next (Israel et al., 2006; Malatras et al.,
2012; Malatras & Israel, 2012).

**Proximal Effects on Family Stability**

While a large portion of the research on the family environment focuses on global aspects
of family stability and related major life events, research and theory also points to the important
role more proximal aspects of the family environment play in contributing to adjustment
outcomes. The purpose of this section is to give insight into the relationships between multiple
similar but distinct constructs of more proximal aspects of the family environment in relation to
more distal influences. The following sections will define some of the constructs included in
these lines of research, situate them in previous research, and explain their possible associations to relationship satisfaction and intimacy.

**Molecular Family Stability**

Israel and colleagues (e.g., 2002, 2006) describe two aspects of family stability: global and molecular family stability. Global family stability, as described previously, encompasses major family life changes which may be conceptualized as more distal from the everyday experience of families. Molecular family stability, on the other hand, focuses more on proximal aspects of the family environment, namely the regularity of daily activities and routines, such as the consistency of bedtime routines, mealtime routines, and time spent with extended family, for example. This conceptualization of molecular family stability as the regularity and predictability of daily family activities and routines allows for the construct of molecular family stability to include possible individual differences in how families achieve stability and, compared to global aspects of family stability, may be more amenable to the control of family members (Malatras, 2012). For example, while one family may create stability by having regular meals together and a regular bedtime routine, another family may create stability by spending time each weekend with extended family members or friends or participating regularly in after-school activities. Families that are able to maintain consistent routines and activities are typically defined as being higher in molecular family stability (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012).

The complex relationship between global and molecular aspects of the family environment has been examined through the work of Israel and colleagues (e.g., 2002, 2006). This work has found that both aspects of family stability (global and molecular) are related to adjustment outcomes. As described previously, it has been found that families that experience
more major family life changes (low levels of global family stability) may be more likely to have children present with more maladaptive adjustment outcomes, such as depression, anxiety, and poor emotion regulation (Israel et al., 2006; Malatras & Israel, 2012). Conversely, it has been found that families who are able to maintain high levels of molecular family stability may have children who present with more adaptive adjustment outcomes (Malatras & Israel, 2012).

The work of Israel and colleagues and others also highlights the ways in which these two aspects of stability are related to one another. Molecular family stability is often dependent on global family stability; distal factors, such as divorce or change in parental employment, often set in motion a string of events that makes the maintenance and predictability of stable routines more difficult (Cerniglia et al., 2014; Dopp & Cain, 2012; Fagan & Churchill, 2013; Israel et al, 2006; Malatras et al, 2012; Malatras & Israel, 2012). For example, in a study done by Buchbinder and colleagues (2009), it was found that major life changes, such as a diagnosis of cancer in a family, often cause disruptions in a family’s ability to maintain consistent daily routines. Additionally, in a study conducted by Rumbold and colleagues (2012) it was found that families that move houses two or more times were more likely to see significant decreases in their ability to maintain consistent daily routines.

As previously mentioned, molecular family stability is often impacted by global family stability, whereby greater family life changes may lead to disruptions in the regularity of daily activities and routines within the family. However, it has also been suggested that many of the negative effects related to major life changes may be mitigated by high levels of molecular family stability (Chalmers, 2005; Ivanova & Israel 2006; Malatras & Israel, 2012; Spagnola & Fiese, 2007). In other words, families who are able to maintain regularity of daily activities and routines, even in the face of major life changes or other stressors, may help protect against the
impact of those adversities on adjustment during childhood and young adulthood. For example, Ivanova & Israel (2006) examined the moderating role of molecular family stability on the effects of parental depression on children. It was suggested that children of parents who were depressed, but who were still able to maintain consistency and stability in their daily routine, had more favorable adjustment outcomes as compared to children of depressed parents who had low levels of molecular family stability (Ivanova & Israel, 2006). In other words, children whose parents were depressed and demonstrated low levels of regularity and consistency in their daily routines had children who were more likely to experience negative adjustment outcomes (Ivanova & Israel, 2006). These findings highlight the importance of maintaining consistent and stable family routines in the face of family life stressors and the notion that consistency in family routines may offer children a predictable, safe, and secure home environment, which may lead to the development of positive psychological and psychosocial outcomes (Chalmers, 2005; Israel et al, 2006; Malatras & Israel, 2012; Spagnola & Fiese, 2007).

**Family Routines**

A related line of research to that of Israel and colleagues focuses on the construct of family routines. This research defines family routines as repeated practices that involve multiple family members, occur around the same time each day, and involve some form of communication between family members (Cassidy, 1992; Spagnola & Fiese, 2007). Examples of family routines include setting the table, going to bed at a certain time, and consistently bringing a child to and from practices after school (Spagnola & Fiese, 2007). It is important to note there is overlap between the construct of family routines and that of molecular family stability as both involve family routines, yet molecular family stability is conceptualized as encompassing a broader range of activities as compared to family routines (e.g., those that occur with family
members and those supported or arranged by immediate family but that might occur outside the
home or without members of the immediate family) and, thus, is expected to include activities
that may apply meaningfully to children across childhood and adolescence (Israel & Roderick,
2001). Despite this overlap and differences, the literature on family routines helps inform our
understanding of the ways in which proximal aspects of the stability of the family environment
influence adjustment outcomes for children, adolescents and emerging adults.

To give a sense of this research, past investigations into family routines have found that families that are able to maintain their routines provide their children with a sense of stability,
especially in the face of adversity. For example, in a study done by Murphy and colleagues
(2009), it was found that children from families that were affected by maternal HIV/AIDS who
had parents that were able to provide consistent daily routines showed lower rates of aggressive
behavior, anxiety/worry, depressive symptoms, conduct disorder behaviors, and binge drinking.
In contrast, children whose parents were not able to provide them with stable and consistent
family routines showed more externalizing behavioral problems and were more at risk for
negative psychopathologies, such as anxiety and depression (Murphy, et al., 2009).

The protective role of more proximal aspects of family stability, including family
routines, is further supported by examining research specific to parental divorce. Specifically,
research shows that families of divorce and separation who maintain consistency in daily
routines across separate households are more likely to have children with fewer negative
emotional and psychological effects (Cerniglia et al., 2014; Dopp & Cain, 2012; Hilla, 2010).
For example, according to this research, children and adolescents of divorce who are raised by
their custodial parent with consistent daily routines often reported fewer health problems, school
absences, and less internalizing and externalizing behavioral issues (Spagnola & Fiese, 2007; Portes et al., 1992).

Additionally, past research suggests that families that are able to maintain their routines may benefit their children’s development of secure attachment styles and positive psychosocial adjustment later in life (Crouter et al., 2004; Eisenberg et al., 2004). Research has also shown that individuals with higher levels of psychosocial adjustment as well as secure attachments may be more likely to experience satisfying intimate relationships. While there is limited research on the direct relationship between the construct of family routines in particular and relationship outcomes later in life, the findings here are relevant as they highlight the importance of understanding those factors that may put people at risk for or protect against adjustment difficulties and may help inform our understanding of those factors that might influence relationship quality (Collibee & Furman, 2015).

**Family Rituals**

Family rituals, much like routines, are specific family practices that involve two or more family members (Spagnola & Fiese, 2007). However, family rituals are often symbolic and have more meaning behind them than daily routines (Spagnola & Fiese, 2007). This difference between the two constructs is most stark when either rituals or routines are disrupted. For example, when routines are disrupted, it may be a hassle, however, when rituals are disrupted, family cohesion may be threatened (Spagnola & Fiese, 2007). Examples of family rituals include large events such as the celebration of birthdays, graduations, and family traditions, along with smaller meaningful events such as family dinners (Spagnola & Fiese, 2007; Yoon, 2012). Family rituals and routines often happen simultaneously, as the act of setting the table and eating around the same time would be defined as a family routine, while traditions like saying grace or going
around the table with each family member detailing their day would be defined as a ritual 
(Spagnola & Fiese, 2007; Yoon, 2012).

Due to their interconnectedness, the stability of family rituals, much like routines, has 
been correlated with positive psychological outcomes such as heightened emotional regulation, 
fewer risk-taking behaviors, and more secure attachment styles (Crouter et al., 2004; Eisenberg 
et al., 2004). Another aspect of family rituals that may affect later outcomes relating to 
psychological adjustment is the meaningfulness of the ritual itself (Fiese & Kline, 1993; 
Spagnola & Fiese, 2007; Yoon, 2012). In fact, Santos and colleagues (2016), found that families 
that had established rituals with meaning to them raised children that showed more secure 
attachment styles in future intimate adult relationships.

Therefore, families that are able to maintain consistency, stability, and meaning in their 
rituals may offer their children a predictable, safe, and secure environment. This, in turn, may 
lead to the development of a secure attachment style as well as positive psychosocial adjustment. 
Given that past research has shown that individuals with higher levels of psychosocial 
adjustment as well as secure attachments may be more likely to experience satisfying intimate 
relationships, it is possible to theorize that families that are able to provide consistent and 
meaningful rituals may have children who are more likely to experience satisfying intimate 
relationships (Fiese & Kline, 1993; Santos et al., 2016; Spagnola & Fiese, 2007; Yoon, 2012).

**Family chaos**

The construct of family chaos (sometimes termed environmental confusion) is defined 
by high levels of noise, crowding, and home traffic. These qualities have all been suggested to 
negatively impact the stability of the home environment (Evans et al., 2005; Matheny et al., 
1995). Since chaos is often related to poorer stability in the household, it can be understood to a 
certain extent as a construct that is inversely related to the constructs of molecular family
family stability and family routines and rituals. Similarly, research on family chaos indicates a relationship between the construct and adjustment patterns in children. For example, in a study done by Evans and colleagues (2005), it was suggested that children of families high in levels of chaos were less likely to be able to regulate their emotions and more likely to experience externalizing and internalizing behaviors (Evans et al., 2005). Based on this research and the research on family stability, one might posit that families high in chaos may not provide their children with a consistent and stable home life. As a consequence of a less stable home, children of households high in chaos may be more likely to develop negative psychosocial outcomes.

There are various ways in which family chaos may impact child, adolescent and emerging adult adjustment. For example, chaos may be associated with high levels of stress and impact the parent-child relationship. Past research suggests that families that are high in chaos may also experience heightened levels of stress, which in turn may lead to more negative parenting practices such as the withdrawal of love and attention as well as harsh punishments (Teachman, 2003; Wu & Martinson, 1993; Zvara et al., 2020). These negative parenting practices may have negative effects on children's security and stability (Teachman, 2003; Wu & Martinson, 1993; Zvara et al., 2020) and may increase the likelihood to develop insecure attachment styles (Ainsworth, 1982; Bowlby, 1982; Waters et al., 2000).

While past research suggests that children of families with high levels of chaos may be at risk of negative psychosocial outcomes, as well as insecure attachment styles, less is known about the impact of chaos on the formation of intimate relationships in adulthood. However, research suggests individuals with insecure attachment styles may be more likely to have less satisfying relationships compared to individuals with secure attachment styles (Gleeson & Fitzgerald, 2014). In light of this and related research previously discussed, chaos in the family...
environment may play a role in relationship outcomes. While this line of research is informative to our thinking about the family environment, it is important to note that the construct of family chaos has been criticized for not fully accounting for cultural and family differences and for the impact of socioeconomic status and geographical influences, such as noise and crowding common in urban settings (Dumas et al., 2005; Marsh et al., 2020).

The Current Study

Previous research has examined the relationship between events that affect family stability such as divorce, death, and the consistency of family rituals and routines, and how these relate to adjustment outcomes which impact later intimate relationship satisfaction (Cerniglia et al., 2014; Dopp & Cain, 2012; Fagan & Churchill, 2013; Jacquet & Surra, 2001). However, there is very little research examining how the relationships between global and molecular family stability while growing up affect later intimate relationship outcomes. A large portion of the literature pertaining to family stability and relationship satisfaction has focused on events that are more distal to the family environment (global family stability), often overlooking the effect these events have on the stability and consistency of home life and daily activities and routines (Israel et al, 2006; Malatras & Israel, 2012; Spagnola & Fiese, 2007). While previous research has found that events that negatively affect family stability such as death, divorce, and illness often have a negative impact on psychological adjustment, very little research has focused on the ways in which maintaining a predictable and stable family environment (molecular family stability) in the face of more global family life changes may impact future relationship and intimacy outcomes (Cerniglia et al., 2014; Dopp & Cain, 2012; Fagan & Churchill, 2013; Jacquet & Surra, 2001). Therefore, this study will expand on past research on family stability by examining the relationships between global and molecular family stability and intimate relationship outcome.
Specifically, the purpose of this study is to further elaborate on past research regarding the influence of the family environment on later intimate relationships by exploring the ways in which aspects of family stability, namely global and molecular family stability, while growing up influence the formation of relationship satisfaction and intimacy in emerging adulthood.

Past research has found that emerging adulthood is an important developmental context for examining the relationship between aspects of the family environment and intimate relationship quality. One important aspect of emerging adulthood, especially in relation to aspects of the family environment, and intimate relationship quality is emerging adult adjustment, which relates to the ability of an individual between the ages of 18 and 25 to adapt to changes in their lifestyle (Arnett, 1998). Examples of changes that may prompt emerging adult adjustment include transitioning to college, moving away from home, or entering into a committed intimate relationship (Arnett, 1998; Azmitia et al., 2013; Malatras et al., 2012). Previous research into the relationship between adjustment and family stability has shown that young adults who have a supportive and stable home environment in their family of origin may be able to adjust more readily to life changes such as transitioning to college (Arnett, 1998; Azmitia et al., 2013; Malatras et al., 2012). Additionally, previous research has found that individuals with less stable home environments, especially in childhood, may be at greater risk for psychological maladjustment (Harris et al., 1990; Khaleque, 2004). Finally, research also suggests that because individuals that come from stable homes have better psychological adjustment, they also have more satisfying and longer-lasting intimate relationships (Kumar & Mattanah, 2016).

This study chooses to examine the quality of relationships in emerging adulthood mainly because this developmental period is often when individuals form their first serious intimate
relationships, as past research suggests that marriage is the goal of dating for the vast majority of emerging adults (Shulman & Connolly, 2013). Past research also suggests that emerging adults may still be developing a sense of identity, as well as facing many challenges relating to school, work, and transitioning into adulthood (Rauer et al., 2013; Shulman & Connolly, 2013). It is believed that because emerging adults are facing many of these challenges, their relationships may face more complexity than married individuals, which may provide more range in relationship measures (Rauer et al., 2013; Shulman & Connolly, 2013). Additionally, many studies of romantic relationships have not focused on the developmental period of emerging adulthood, instead focusing on adulthood (Gómez-López et al., 2019). Therefore, because emerging adulthood has been recognized as an important developmental period for relationships, along with past research suggesting that this developmental period may be understudied and more complex than other developmental periods, it was determined that it was an ideal developmental period to examine.

To that end, this study will help expand our understanding of the ways in which family stability may be related to emerging adult adjustment, with specific focus on its impact on indicators of relationship quality. Furthermore, this study will examine the potential protective role of molecular family stability in relation to the impact of major family life changes on relationship satisfaction and intimacy.

We first hypothesize that global family stability will be related to molecular family stability, where greater major family life changes (decreased global family stability) will be associated with less regularity in daily activities and routines (lower molecular family stability). Furthermore, we hypothesize that individuals who experience more major family life changes in their childhood and adolescent years (decreased global family stability) will report having less
satisfying and intimate relationships in early adulthood. We also hypothesize that individuals who report their family of origin maintained greater regularity of daily activities and routines (greater molecular family stability) will report being in more satisfying and intimate relationships. Finally, we hypothesize that molecular family stability will play a moderating role in the relationship between family life changes and relationship satisfaction and intimacy. We believe that the relationships between major family life changes and relationship satisfaction and intimacy will each depend on the level of regularity of daily activities and routines, where the impact of family life changes on relationship satisfaction will be lower for individuals from families high in molecular family stability (See Figures 1 and 2).
Method

Participants

Participants included 152 emerging adults aged 18 to 25 years ($M = 22.51, SD = 1.73$) who endorsed being in intimate relationships at the time of participation in the present study. The majority of participants reported identifying as cisgender female (70.3%), 24.7 percent identified as a cisgender male, 3.2 percent as gender nonbinary, and 1.9 percent as transgender male or female. Participants were recruited through Prolific, an online survey platform. Participants self-reported their racial and ethnic identities and could select more than one category to describe their identity, and thus results sum to more than 100 percent. The majority of participants identified as white (76%), 12.1 percent as Asian, 3.0 percent as Black/ African American, 0.6 percent American Indian/ Alaskan Native, 0.6 percent as Native Hawaiian or Other Pacific Islander, 4.9 percent identified as other, 1.8 percent preferred to self-describe, 0.6 percent preferred not to say. Ethnic demographics were as follows: 89.8 percent non-Latinx, 3.2 percent Mexican, 2.6 percent Latinx/Spanish, 0.6 percent Puerto Rican, 0.6 percent Cuban, 2.6 percent identified as other ethnicity, and 0.6 percent preferred to self-describe. The participants were sampled from the United States (18.9%) and the United Kingdom (81.1%).

Materials

Participants completed a series of questionnaires using the online data collection platform Qualtrics, which included demographic questions relating to gender, age, race, ethnicity, and relationship status. Participants completed measures assessing global and molecular family stability, as well as questionnaires measuring relationship satisfaction and emotional intimacy.
Global Family Stability

The Family Life Changes Survey (FLCS; Israel et al., 2006) was used to measure the occurrence of specific family life changes in the family of origin. Participants report on family changes while growing up over the span of four developmental phases (before kindergarten, elementary school, middle school, and high school). The FLCS consists of 36 self-report questions relating to seven distinct family life changes, including parental absence, low parental contact, change in household residents, change in parental employment, change in residence, change in after-school care, and non-normative school changes (Israel et al., 2006). A total family life changes score is obtained by a summation of all yes (1) and no (0) answers over each developmental period, giving a range of possible scores from 0 to 31 (Israel et al., 2006).

Additionally, the FLCS also asks questions about events relating to family structure such as divorce, death, and parental separation, along with questions about who the participant identified as their parental figures at each developmental phase, which are not included in the total family life changes score (Israel et al., 2006). The FLCS shows good test-retest reliability for each developmental period, ranging from 0.9 to 0.93 (Israel et al., 2006). The FLCS showed good internal consistency for this study with a Chronbachs alpha of 0.82.

Molecular Family Stability

Molecular family stability was measured using the Stability of Activities in the Family Environment retrospective report (SAFE-R; Israel et al., 2002). The SAFE-R is a 24-item self-report questionnaire that measures the regularity of family activities that individuals experienced while growing up (Israel et al., 2002). Questions include items that ask participants to rate the regularity of the family activities on a 7-point scale from 0 (not at all) to 6 (extremely regular) and include items such as, “How regular was the routine for you at bedtime on
weekdays?”, “On weekends, how regularly did you engage in enjoyable activities with someone other than your family?” and “How regularly was time set aside for you to talk to your parent(s)” (Israel et al., 2002). A total stability score is obtained by summing the first 23 items and yields a minimum score of 0 and a maximum of 138, with higher scores indicating higher levels of regularity (Israel et al., 2002). The SAFE-R has been shown to have good internal consistency in previous research with a Cronbach's alpha of 0.84 (Israel et al., 2002), for example. Additionally, the SAFE-R shows good test-retest reliability, with a Pearson's r of 0.86 (Israel et al., 2002). The SAFE-R also showed good internal consistency in the present study with a Chronbach's alpha of 0.83. Finally, the SAFE-R has shown good convergent validity with other validated family measures (Israel et al., 2002).

**Emotional Intimacy**

Perceived emotional intimacy of relationships was measured using the Emotional Intimacy Scale (EIS; Sinclair & Dowdy, 2005). The EIS is a 5-item self-report questionnaire that measures the participants’ perceived intimacy of their relationship with an individual (Sinclair & Dowdy, 2005). The participants were asked to rate statements, such as “This person accepts me completely as I am” and “This person cares for me deeply,” on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree; Sinclair & Dowdy, 2005). The EIS yields a minimum score of 5 (low perceived intimacy) and a maximum of 5 (high perceived intimacy; Sinclair & Dowdy, 2005). The EIS has shown good internal consistency in previous studies with a Cronbach's alpha of 0.88 (Sinclair & Dowdy, 2005). Additionally, the EIS shows good test-retest reliability, with a Pearson's r of 0.85 (Sinclair & Dowdy, 2005). The EIS also showed good internal consistency in this study with a Chronbachs alpha of 0.89. The EIS also shows good
convergent validity with other validated measures of intimacy, social support, and psychological well-being (Sinclair & Dowdy, 2005).

**Relationship Satisfaction**

Participants’ relationship satisfaction was measured using the Relationship Assessment Scale (RAS; Hendrick et al., 1988). The RAS is a 7-item self-report questionnaire that measures participants' satisfaction with their relationship, in this case with an individual they identify as their significant other (Hendrick et al., 1988). Participants were asked to rate statements such as “How much do you love your partner” and “To what extent has your relationship met your original expectations,” on a 5-point Likert scale from 1 (low satisfaction) to 5 (high satisfaction; Hendrick et al., 1988). Items yield a total score with a minimum score of 7 (low satisfaction) and a maximum of 35 (high satisfaction; Hendrick et al., 1988). The RAS has shown good internal consistency with a Cronbach's alpha of 0.86 in previous studies (Hendrick et al., 1988). Additionally, the RAS shows good test-retest reliability, with a Pearson's r of 0.85 (Hendrick et al., 1988). The RAS also showed good internal consistency in this study with a Chronbachs alpha of 0.77. The RAS also shows good convergent validity with other validated measures of relationship satisfaction, and marital satisfaction, such as the Kansas Marital Satisfaction Scale (KMSS; Schumm et al., 1986) and the Didactic Adjustment Scale (DAS; Spanier, 1976; Hendrick et al., 1988).

**Procedure**

All procedures followed guidelines for the protection of human subjects and were approved by the College’s Human Subjects Research Committee. As described, all participants were recruited using Prolific, an online survey administration website, which linked participants to a survey administered through the online survey administration platform Qualtrics.
Participants were first provided an electronic informed consent document, and if the participant endorsed their consent they were then asked to complete demographic questions relating to age, race, relationship status, and country of origin. Following the demographics questions, participants automatically moved on to complete the study questionnaires, which includes the Family Life Changes Survey (FLCS, Israel et al., 2006), the Stability of Activities in the Family Environment-Retrospective (SAFE-R, Israel et al., 2002), the Relationship Assessment Scale (RAS, Hendrick et al., 1988), and the Emotional Intimacy Scale (EIS, Sinclair et al., 2005) in that order. After completing the survey the participants were presented with debriefing information. Participants were paid at a rate of $8.00 hourly for their participation with a median time of completion of 9 minutes and 25 seconds; payment was made directly via the Prolific platform.

**Statistical Analyses**

To begin the statistical analyses, scores on all measures were calculated according to the scoring criteria outlined by each measure’s validation study, and descriptive analyses, including means and standard deviations for each measure, were conducted (See Table 1). Bivariate correlations were run between all measures to determine the relationships between molecular family stability, global family stability, relationship satisfaction, and perceived emotional intimacy and are presented in Table 2. Regression moderation analyses were then conducted using The “PROCESS” macro, model 1, v4.43 to test two proposed potential moderation models, including (1) a model in which molecular family stability was predicted to have a moderating effect on the relationship between global family stability and relationship satisfaction and (2) a model in which molecular family stability was predicted to have a moderating effect on the relationship between global family stability and perceived emotional intimacy (see Figures 1
and 2, respectively; Hayes, 2013). All statistical analyses were performed using Statistical Package for the Social Sciences (SPSS).

Results

Preliminary Analyses

The original sample consisted of 161 participant responses which were screened for missing data and outliers. Five individuals did not consent to the study and did not proceed with answering any of the study questionnaires. The data for four participants was excluded from the analysis as they did not meet study inclusion criteria, as they stated that they were not currently in an intimate relationship. Of the remaining 152 participants, data was screened for missing data. Overall, no participant was missing more than 5% of data for any one measure, and total missing participant data did not exceed 5% of our total data (0.49%). As a result, cases missing less than 5% on a measure were retained, as they could be included in the analyses for which all necessary data were available, and means for the subject’s remaining items for that measure was imputed for the missing values (Fernandez-Garcia et al., 2018). An outlier analysis was conducted and found that 16 cases were identified as outliers. Mdn EIS scores of 25 (IQR= 2), Mdn FLCS scores of 5 (IQR= 5), Mdn RAS scores of 32 (IQR= 4.5), and Mdn SAFE-R scores of 84 (IQR= 24). No outliers were dropped, as removing outliers has the potential to increase the risk of a Type 1 error, and average scores, ranges, and standard deviations for each measure were fairly consistent with measures of each original construct, suggesting that the data represents a normal distribution (Gress et al., 2020). Additional analyses of skewness and kurtosis were also conducted, as follows: $EIS_{\text{skew}} = -3.4$, $EIS_{\text{kurtosis}} = 17.3$, $FLCS_{\text{skew}} = 1.1$, $FLCS_{\text{kurtosis}} = .794$, $RAS_{\text{skew}} = -1.1$, $RAS_{\text{kurtosis}} = 1.3$, $SAFE-R_{\text{skew}} = -.367$, $SAFE-R_{\text{kurtosis}} = .07$. The statistics relating to
skewness and kurtosis for each measure were fairly consistent with measures of each original construct, suggesting that the data was sampled correctly.

**Descriptive statistics**

Means, standard deviations, and ranges for all four scales are provided in Table 2. Additionally, correlations between scores of molecular family stability (SAFE-R), global family stability (FLCS), relationship satisfaction (RAS), and perceived emotional intimacy (EIS) are shown in Table 1. Examination of Table 1 suggests that, as expected, there was an inverse relationship between scores on the FLCS (higher scores indicate lower global family stability) and SAFE-R (higher scores indicating greater molecular family stability), where more family life changes (lower global family stability) were associated at the bivariate level with lower levels of regularity of family activities and routines (lower molecular family stability). In addition, as expected, there was a positive relationship between scores on the RAS and EIS, where greater relationship satisfaction was associated with greater intimacy. Contrary to expectations, neither global family stability (FLCS) nor molecular family stability (SAFE-R) were correlated at the bivariate level with either relationship variable.

**Regression Analysis of the Proposed Moderation Models**

Despite the lack of association at the bivariate level between global family stability (FLCS) and the outcome variables (RAS and EIS), exploratory analyses were conducted to examine the proposed moderation models in which molecular family stability (SAFE-R) was proposed to moderate the relationship between global family life changes (FLCS) and each of the relationship variables (satisfaction (RAS) and intimacy (EIS)). A separate series of regression analyses were performed for each model using the “PROCESS” macro, model 1, v4.43 to determine if molecular family stability had a moderating effect on the relationship between either...
global family stability and relationship satisfaction or global family stability and perceived emotional intimacy (Hayes, 2013).

**Global Family Stability, Molecular Family Stability, and Relationship Satisfaction**

As can be seen in Table 4, the proposed moderating effect of molecular family stability on the relationship between global family stability and relationship satisfaction was not supported. Additionally, Table 4 also shows that global family stability has no significant direct effect on relationship satisfaction. The interaction term between molecular and global family stability explained no significant variance in perceived emotional intimacy, $\Delta R^2 = 0.0002$, $F(1,148) = 0.026$, $p = 0.872$. To describe the findings in more detail, when levels of molecular family stability were +1SD above their mean, the slope of the relationship between global family stability and relationship satisfaction was 0.0315. Conversely, when levels of molecular family stability were -1SD below their mean, the slope of the relationship between global family stability and relationship satisfaction was 0.0136. This relationship is illustrated in Figure 3.

**Global Family Stability, Molecular Family Stability, and Perceived Emotional Intimacy**

As can be seen in Table 3, the proposed moderating effect of molecular family stability on the relationship between global family stability and perceived emotional intimacy was not supported. Additionally, Table 3 shows that global family stability has no significant direct effect on perceived emotional intimacy. The interaction term between molecular and global family stability did not explain a significant variance in perceived emotional intimacy, $\Delta R^2 = 0.000$, $F(1,148) = 0.005$, $p = 0.945$. When levels of molecular family stability were +1SD above their mean, the slope of the relationship between global family stability and perceived emotional intimacy was 0.005. Conversely, when levels of molecular family stability were -1SD below their mean, the slope of the relationship between global family stability and perceived emotional
intimacy was 0.012, suggesting that lower levels of molecular family stability may have a slight moderating effect on the relationship between global family stability and perceived emotional intimacy. This relationship is illustrated in Figure 4.

Discussion

The purpose of this study was to contribute to previous research regarding the relationship between aspects of the family environment, namely global and molecular family stability, and adjustment, with specific focus on relationship satisfaction and intimacy. Furthermore, this study sought to examine molecular family stability as a protective factor, testing proposed models in which molecular family stability while growing up was hypothesized to buffer the effects of major family life changes on future relationship satisfaction and intimacy. Specifically, it was hypothesized that global and molecular family stability would be related to one another, whereby greater global family stability would be associated with greater molecular family stability, and that each aspect of family stability would be related to the two outcome variables (relationship satisfaction and intimacy) with greater stability associated with more positive relationship indicators. Furthermore, it was hypothesized that the impact of family life changes on relationship satisfaction and intimacy would be lower for individuals from families high in molecular family stability.

With regard to the correlational analyses, it was found that, as expected, there were significant relationships between molecular and global family stability, as well as significant correlations between relationship satisfaction and perceived emotional intimacy. For family stability, participants that scored higher on the FLCS (lower levels of global family stability) often reported lower levels of molecular family stability and vice versa. For measures of relationship satisfaction and perceived emotional intimacy, it was found that high levels of
reported relationship satisfaction was associated with high levels of reported perceived emotional intimacy and vice versa. These findings are consistent with previous research with regard to the correlational relationships between global and molecular family stability, as well as the correlational relationship between relationship satisfaction and perceived emotional intimacy (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012; Murray & Hazelwood, 2011; Wardecker et al., 2015; Whisman & Baucom, 2012). However, the lack of significant associations between aspects of family stability and adjustment outcomes, in this case relationship satisfaction and intimacy, were inconsistent with prior outcomes that suggest both aspects of family stability while growing up to be important indicators of adjustment in emerging adulthood.

Additionally, given the lack of a significant association between global family stability and the outcome variables, it was not expected that molecular family stability would play a moderating role between these variables. However, to explore the data, moderation analyses were conducted. As expected, given the lack of significant correlations at the bivariate level, neither model was upheld. Contrary to past research, global family stability was not related to adjustment, in this case relationship satisfaction and intimacy, and thus a model in which molecular family stability moderates the relationship between major family life changes and relationship satisfaction and intimacy was not supported.

A multitude of prior studies have demonstrated that molecular family stability and related constructs may act as a protective factor against negative psychological outcomes (Crouter et al., 2004; Eisenberg et al., 2004; Murphy, et al., 2009; Yoon, 2012), and thus the findings of the present study were surprising as relationship satisfaction was posited to be one indicator of psychosocial adjustment. Past research, for example, has found that families that are able to
Family Stability and Intimate Relationships

maintain consistent routines in their home provide their children with a sense of stability that may protect against the development of aggressive behavior, anxiety/worry, depressive symptoms, and poor emotional control (Crouter et al., 2004; Eisenberg et al., 2004; Murphy, et al., 2009; Yoon, 2012), while low stability households may predispose children to aggressive behaviors, negative psychopathology, and poor emotional control (Evans et al., 2005). Since these adjustment factors have been suggested to put children at risk for less satisfying intimate relationships in adulthood (Brewer & Sparkes, 2011; Guzzo & Gobbi, 2021), it was expected that family stability would play an important role in relationship quality. In light of past research, the findings of this study are unexpected, as family stability while growing up was posited to be related to relationship outcomes in emerging adulthood.

In exploring possible explanations for the findings of the present study, it would be important to consider the role development plays in the relationship between aspects of family stability and later relationship quality. One possible explanation, for example, might consider the developmental nature of family influences. In particular, it is possible that there may be developmental differences in the ways in which major family life changes impact later adjustment. Specifically, the degree to which major life changes impact outcomes may depend, in part, on the timing of the change. For example, a study conducted by Cerniglia and colleagues (2014) found that the adverse psychological and emotional effects of major life events, such as parental death, were less intense as individuals aged. Specifically, prepubescent individuals who experience parental death showed significantly more negative psychopathology compared to their adolescent counterparts. Additionally, this research suggests that individuals who experienced the death of a parent before the age of three were the most likely to have persisting psychopathological symptoms (Cerniglia et al., 2014). Another study that supports the
importance of developmental timing of major family life changes was conducted by Dunn and colleagues (2018), who found that children who were exposed to major family life changes such as the death of a family member or parental divorce, showed different levels of internalizing and externalizing behaviors at different age ranges. For example, for the age range of 0 to 5 years, it was found that children exposed to major life events at these ages showed twice the risk of developing psychopathology in relation to older developmental stages (Dunn et al., 2018). It was also found that children aged 6 to 11 years experienced double the risk of developing negative psychopathology when compared to adults who shared the same major life changes during adulthood (Dunn et al., 2018). A limitation of the present study is that, while participants were asked to report on the different domains of major family life changes during distinct developmental levels, the total family life changes score used in this study aggregates these changes across development levels and, thus, findings reflect total life changes and not a more nuanced examination of the impact of change depending on developmental level. Future studies that examine timing of major life changes and their potential influence on relationship outcomes may help us better understand these constructs in the context of development.

In addition to developmental timing, it is important to consider other salient aspects of the individual or their experience while growing up that might influence relationship outcomes. One construct that may be an important predictor of relationship satisfaction that was not measured in the current study is temperamental differences in individuals. Temperament is defined as the manner of thinking, behaving, or reactive characteristics of a certain individual (Hagan et al., 2014; McCrae et al., 2000). Interestingly, it is believed that temperamental differences in individuals may shape their perceptions of major life events and the stability of the family environment (Hagan et al., 2014). For example, some individuals may be biologically
predisposed to be more reactive to major life events or an unstable home. Consequently, these individuals may also be more likely to experience the negative psychological effects related to major life changes and an unstable home environment. For example, in a study conducted by Hagan and colleagues (2014), it was found that individuals who were more reactive to stressful events often showed more internalizing and externalizing behaviors. It has also been found that individuals that show more internalizing and externalizing behaviors may also be more likely to experience dissatisfying intimate relationships (Collibee & Furman 2015). Judging from these findings, it is possible that individuals that experience stressors due to major life changes, or an unstable home environment may not experience them the same way. Future studies that include measures of temperament may help parse out the ways in which temperamental qualities, such as emotional reactivity to major family life events, may influence the degree to which those changes impact adjustment and relationship quality.

The influence of family variables on later relationship outcomes may also be understood by considering the role parenting plays in these relationships. While there has been support for considering family stability (particularly molecular family stability) as a parenting practice (e.g., Malatras, 2012), it is possible that other aspects of parenting may be more salient predictors of later relationship satisfaction and intimacy. For example, four different parenting styles have been identified in the literature: permissive, authoritative, neglectful, and authoritarian, each of which has been associated with psychosocial adjustment outcomes in children (Baumrind, 1971). It has been suggested that families who practice authoritative parenting, characterized by a nurturing, responsive and supportive style of parenting in which parents set firm limits on behavior, often produce children who are more emotionally intelligent (Reyes-Wapano, 2021). In turn, emotional intelligence has been highly correlated with relationship satisfaction, as
individuals who are more emotionally intelligent have been found to be more adaptive, assertive, perceptive, emotionally stable, self-motivated, etc., traits related to the development of more satisfying intimate relationships (Petrides et al., 2004; Reyes-Wapano, 2021; Smith et al., 2008). In fact, in a meta-analysis conducted by Smith and colleagues (2008), it was found that individuals with higher levels of emotional intelligence often report greater relationship satisfaction. Additionally, it was found that individuals that perceive their partner as being more emotionally intelligent also often reported greater relationship satisfaction. These findings suggest that parenting styles may be an important predictor of relationship satisfaction and intimacy in early adulthood and worthy of future studies examining the influence of parenting and early family life experiences on relationship quality.

In addition to the possibility of there being more salient predictors of relationship satisfaction than those assessed in the present study, the results of this study may also be due to possible limitations of design. The first of these limitations have to do with the measure selection, in particular the length of the questionnaires of relationship satisfaction and intimacy used in this study. Both outcome measures used in this study were relatively brief in scope: The EIS is only a 5-item questionnaire, while the RAS has 7 items. Although these measures are validated and have been used in the research literature, there may be insufficient variability to detect effects in this sample. The measures were selected for brevity with the goal of reducing attrition, however future studies might explore measuring aspects of relationship adjustment with greater breadth and sensitivity in measurement. Another limitation regarding the scales used to quantify relationship satisfaction and intimacy is their skewness, which appeared in the present study as well as in the validation literature. Both scales measure their items on a 5-point Likert scale, and have reported means of 4.07-4.33 for the RAS, and approximately 4.6 for the EIS.
Hendrick et al., 1988; Sinclair & Dowdy, 2005). Given that the majority of participants typically fall toward one extreme of the measure, they may lack sufficient variability to detect effects. There are also limitations regarding the measurements of global and molecular family stability, with the most prominent being that participants reported stability retrospectively. Scales presented retrospectively are prone to misclassification bias and recall bias, both of which may negatively affect the validity of the present study. For example, individuals who are currently in satisfying intimate relationships may be more likely to recall their upbringing as being more positive. Conversely, individuals who are currently in unfulfilling relationships may be more likely to look back on their early family life more negatively. These hypotheses are supported by research into negativity bias and positivity bias that shows that individuals responses in studies may be affected by their current mood during participation (Gordon et al., 2008). Future studies might try to account for these limitations by measuring these constructs longitudinally.

Additionally, the Family Life Changes Survey used in this study was considerably longer in length, consisting of 180 questions, which may have impacted participant attention or persistence and might have had a negative impact on data quality. Future studies utilizing this measure via remote procedures might include attention checks to ensure participants are alert to the questions and responding as accurately as possible. Additionally, along with limitations regarding the scales used in this study, the participants sampled for this study were predominantly British (81.1%). This sample imbalance may negatively affect the generalizability of this study's findings, as this study was based in the United States. Therefore, caution should be exercised in extending these findings to other populations.

Despite not supporting some of our hypotheses, this study did replicate past findings on the relationship between global and molecular family stability. More specifically, this study
found that these two aspects of family stability are related to each other, whereby greater global family stability is associated with greater molecular family stability and conversely. These findings are important as they add support to two possible mechanisms for this relationship. The first of these is that families who experience multiple major family life changes, such as parental separation or divorce, changes in residence or changes in household composition that often accompany divorce, may find it more challenging to maintain regularity in their daily routines and activities. This explanation is supported by a recent study done by Prime and Colleagues (2020), who found that families who experienced major family life changes due to the COVID-19 pandemic such as financial instability and death were also more prone to experiencing disruptions to their daily routines. Examples of these disruptions include changes to school routines, extracurricular activities, changes in bedtime routines, and more time spent in front of screens (Prime et al., 2020). It seems that families with greater instability in global aspects of family stability may be at risk for greater instability in the more proximal aspects of daily life, such as family activities and routines.

Alternatively, the inverse is also possible, as families who have lower levels of molecular family stability or less predictability and regularity of their daily routines may be more likely to experience disruptions in global aspects of family stability. For example, families whose homes are more prone to chaos and disorder may experience stressors that predispose them to major family life changes such as parental separation or divorce. This explanation is supported by past research on family chaos that has found that families higher in levels of disorder and lower in levels of stability may experience more stressors that predispose them to major family life changes such as divorce, separation, and financial instability (Fiese & Winter, 2010; Kracht et al., 2021; Zvara et al., 2020). These and related findings may have important implications in
terms of intervention, as interventions aimed at identifying families at risk for instability due to high levels of irregularity of their daily family activities and routines or high levels of chaos may be able to benefit from efforts to increase stability in their daily life and, thus, potentially lower their risk for more major family life changes.

In essence, these findings may have important possible clinical implications. Therapeutic interventions directed at helping families create more regularity in their daily activities and routines may help to prevent major life changes such as divorce and separation. Leaning on past research that has found that families who have difficulty maintaining consistent routines and rituals may be more likely to experience stress and as a result may be more prone to divorce and separation, interventions aimed at preventing major family life changes could intervene at the molecular level, helping families create regularity in their daily activities and routines, areas which may be more amenable to prevention (Buehlman et al., 1992). By providing families with skills and resources to improve the consistency of daily routines, families may be able to reduce their overall stress and, in turn, reduce their risk for divorce and separation and other major life changes.

Past research has also found that families that are able to maintain consistency in their daily routines, despite experiencing major life changes, may lessen the psychological and physiological effects of major life events on their children (Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012). An example of this can be seen in a study conducted by Anderson (2014), that suggested that families that were able to maintain consistency and stability in their daily routines had children who were affected less severely by their parents divorce. Even though the present study did not find support for a moderating role of molecular family stability in the relationships between family life changes and relationship satisfaction and
intimacy, judging from previous findings, it may be beneficial to clinicians to provide families with skills to maintain the consistency of their daily routines during major family life changes to potentially moderate the negative psychological and physiological effects on children, which may in turn benefit them in the long run, including their formation of satisfying intimate relationships (Anderson 2014; Israel et al., 2006; Malatras et al., 2012; Malatras & Israel, 2012).

To conclude, the purpose of this study was to examine the relationship between molecular family stability, global family stability, relationship satisfaction, and perceived emotional intimacy. The findings of the study supported an association between global and molecular aspects of stability and between relationship satisfaction and intimacy but did not support a model in which family stability while growing up is related to later relationship satisfaction and intimacy. Despite these findings, the present study helps bolster past research by replicating findings on the relationship between global and molecular family stability and provides suggestions for exploring other influences of the family environment and parenting practices that may be important in the formation of intimate relationships. These findings and areas for future research may have clinical importance and may also provide a strong base for future research. Understanding the way in which early life experiences and aspects of the family environment may shape later relationship quality is an important area of study as it may help provide insight into what factors may be protective or may provide opportunity for intervention to support emerging adjustment in youth and adulthood.
References


https://doi.org/10.1177/1077559514539753


https://doi.org/10.1037/0022-3514.52.3.511


https://doi.org/10.1177/0265407598151009


Jung HS. The relationships among maternal attachment, caring behavior and children's attachment *[dissertation]* Seoul: Sookmyung Women's University; 2000. pp. 1–73.


Table 1.


<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Possible Range</th>
<th>Actual Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FLCS</td>
<td>152</td>
<td>5.63</td>
<td>4.609</td>
<td>0-31</td>
<td>0-20</td>
</tr>
<tr>
<td>2. SAFE-R</td>
<td>152</td>
<td>83.48</td>
<td>16.416</td>
<td>0-138</td>
<td>35-121</td>
</tr>
<tr>
<td>3. RAS</td>
<td>152</td>
<td>31.14</td>
<td>2.785</td>
<td>5-35</td>
<td>18-35</td>
</tr>
<tr>
<td>4. EIS</td>
<td>152</td>
<td>23.36</td>
<td>3.251</td>
<td>5-25</td>
<td>5-25</td>
</tr>
</tbody>
</table>

Note: Measures used were Family Life Changes Survey (FLCS); Stability of Activities in the Family Environment retrospective report (SAFE-R); Relationship Assessment Scale (RAS); Emotional Intimacy Scale (EIS).
Table 2.

Correlations between Molecular Family Stability scores, Global Family Stability scores, and measures of Relationship Satisfaction and Perceived Emotional Intimacy.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Global family stability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Molecular family stability</td>
<td>-.286**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Relationship Satisfaction</td>
<td>.000</td>
<td>.118</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Perceived emotional intimacy</td>
<td>-.018</td>
<td>.104</td>
<td>.376**</td>
<td>-</td>
</tr>
</tbody>
</table>

* = p > 0.05, ** = p > 0.01, *** = p = 0.0001 Note: Measures used were Global Family Stability (FLCS); Molecular Family Stability (SAFE-R); Relationship Satisfaction (RAS); Perceived Emotional Intimacy (EIS).
Table 3.


<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>t</th>
<th>p</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLCS</td>
<td>0.009</td>
<td>0.055</td>
<td>0.160</td>
<td>0.873</td>
<td>0.109</td>
</tr>
<tr>
<td>SAFE-R</td>
<td>0.182</td>
<td>0.015</td>
<td>1.26</td>
<td>0.210</td>
<td></td>
</tr>
<tr>
<td>FLCS * SAFE-R (INT)</td>
<td>0.0002</td>
<td>0.003</td>
<td>0.070</td>
<td>0.945</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Measures used were Family Life Changes Survey (FLCS); Stability of Activities in the Family Environment retrospective report (SAFE-R); Global Family Stability × Molecular Family Stability Interaction (FLCS * SAFE-R (INT)).
Table 4.

Effects and standard errors of Global Family Stability, Molecular Family Stability, and the Moderational Effect of Molecular Family Stability on Relationship Satisfaction scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>t</th>
<th>p</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLCS</td>
<td>0.023</td>
<td>0.064</td>
<td>0.350</td>
<td>0.727</td>
<td>0.016</td>
</tr>
<tr>
<td>SAFE-R</td>
<td>0.025</td>
<td>0.017</td>
<td>1.51</td>
<td>0.134</td>
<td></td>
</tr>
<tr>
<td>FLCS * SAFE-R (INT)</td>
<td>-0.001</td>
<td>0.003</td>
<td>-0.161</td>
<td>0.872</td>
<td></td>
</tr>
</tbody>
</table>

Note: Measures used were, Family Life Changes Survey (FLCS); Stability of Activities in the Family Environment retrospective report (SAFE-R); Global Family Stability × Molecular Family Stability Interaction (FLCS * SAFE-R (INT)).
Figure 1.

The proposed moderational relationship of molecular family stability on the association between global family stability and relationship satisfaction outcomes
Figure 2.

The proposed moderational relationship of molecular family stability on the association between global family stability and perceived emotional intimacy
Figure 3.

Slopes of family life changes (FLCS) on relationship satisfaction (RAS) at low (1 SD below mean) and high (1 SD above mean) levels of molecular family stability (SAFE-R). Note: Relationship Satisfaction is based on a scale from 0 to 5, with 0 indicating “low” relationship satisfaction and 5 indicating “high” relationship satisfaction.

Note: Measures used were, Family Life Changes Survey (FLCS); Stability of Activities in the Family Environment retrospective report (SAFE-R).
Figure 4.

Slopes of family life changes (FLCS) on perceived emotional intimacy (EIS) at low (1 SD below mean) and high (1 SD above mean) levels of molecular family stability (SAFE-R). Note: perceived emotional intimacy is based on a scale from 0 to 5, with 0 indicating “low” perceived emotional intimacy and 5 indicating “high” perceived emotional intimacy.

Note: Measures used were, Family Life Changes Survey (FLCS); Stability of Activities in the Family Environment retrospective report (SAFE-R).