UNDERSTANDING DIVORCE IN THE CONTEXT OF STEPFAMILIES

by

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Abstract

Although the divorce rate in first-marriages has stabilized after years of increase in North America, the divorce rate of remarriages continues to increase. It has been suggested that increased divorce rates in remarriages may be attributable to higher levels of conflict in stepfamilies (e.g., Hobart, 1991). Drawing from family systems theory and contextual models of divorce, this study tested the hypotheses that tension levels in stepfamily dyads will predict divorce above and beyond the effects of marital quality alone and that increasing emotional and marital distress will be mechanisms through which the stepfamily system affects marital stability. Data were collected from 112 couples who were followed for 20 years. Logistic regression analyses tested main and interaction effects of marital quality and (step)parent-child tension levels on divorce probability. Depression and marital quality were also tested as mediators and moderators of the effects of stepfamily relationship quality on divorce. Results confirmed that marital quality is an important predictor of divorce in stepfamilies, as it is in first-marriages. However, results also revealed that stepparent-child tension moderates the effect of marital quality on divorce. Depression mediated the effects of marital quality on divorce for wives, but not husbands. The importance of using a contextual approach for stepfamily research and clinical interventions is discussed.
Preface

This dissertation is based on a larger study that was designed and implemented by Dr. Anita DeLongis and her collaborators. I (A. Zwicker) contributed to research design and data collection in Time 3 of the larger study. Data analysis and manuscript preparation for this dissertation are my original work. This research was approved by the University of British Columbia Behavioural Research Ethics Board, and was covered by certificate H07-02244, which was granted to the project entitled "Step-Family Project: Follow-Up."
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Introduction

Over the last four decades, the divorce rate in Canada has increased by an astounding 600%; this rate is currently at about 40% of all marriages (Statistics Canada, 2005). This is only marginally lower than that in the United States (U.S.), which is approximately 40-50% and is the highest divorce rate in the Western world (Ganong, Coleman, & Hans, 2006). These remarkable numbers are balanced somewhat by the fact that the divorce rate, at least for the time being, has stabilized. The year-to-year change in Canada has not exceeded 2% since 1999 (Statistics Canada, 2012). Similarly, the National Survey of Family Growth has shown stabilization in the American divorce rate over the past few decades.

The majority of divorced adults remarry. In Canada, approximately 70% of divorced men and 58% of divorced women remarry (Ambert, 2005). Many remarrying individuals bring children from a previous union into the home, thus forming a stepfamily. In addition to stepfamilies formed through remarriage, it is increasingly common for stepfamilies to be formed through cohabitation given that the rate of common-law unions is increasing (Sweeney, 2010). Recent Canadian census data revealed that 48% of partners in stepfamilies were living in common-law unions rather than legal marriages (Statistics Canada, 2012).

Stepfamilies are described in different ways; “simple” stepfamilies occur when just one parent brings children from a previous union into the home whereas “complex” stepfamilies occur when both parents bring children from prior unions into the home, or when one parent brings children from a prior union and children are produced in the current union. Recent data in Canada demonstrates a clear increase
in the complexity of stepfamily forms—whereas the proportion of complex
stepfamilies in Canada was 39% in 1995, this proportion had risen to 41% by 2001
and to 51% by 2011 (Statistics Canada, 2012).

Stepfamilies have the potential to improve family functioning from that of a
single parent home. However, this potential is pitted against the reality that
remarriages are not as stable as first-marriages (Brody, Neubaum, & Forehand,
1988; Cherlin, 1978; Preece & DeLongis, 2005). The divorce rate among remarried
couples in Canada is estimated to be at least 10% higher than that in first-marriages,
but only when remarried individuals have children from previous unions (Ambert,
2005). Similarly, the divorce rate for remarriages in the U.S. is approximately 50-
60% as opposed to 40-50% of first marriages (Ganong et al., 2006). Not only does
divorce occur more often in stepfamilies, it occurs more quickly (Coleman, Ganong,
& Fine, 2000). Also, unlike the stabilized rate of divorce in the general population, the
rate of repeated divorce is increasing, with no indication of stabilization. Over the last
three decades, the proportion of divorces that were actually repeat divorces for one
or both partners has increased three-fold in Canada. In 1973, only 5% of divorces in
Canada were repeat divorces, whereas statistics collected in 2003 suggested that at
least 16% of all divorces were repeat divorces (Statistics Canada, 2005). The same
trend has occurred in the U.S. with the rate of serial divorces and remarriages
increasing dramatically in the last few decades (Coleman et al., 2000).

Divorce has considerable consequences for both marital partners and for the
children of these dissolved marriages. With each divorce, adults potentially stand to
lose social support, experience health problems like depression, and face decreased
financial stability (Ambert, 2005). Decades of research has consistently found that children of divorced families generally experience more behavioural problems; lower psychological well-being; and poorer self-concept, social relationships, and academic achievement relative to children from nuclear families (Amato, 2001) and that these problems worsen with multiple family transitions (Amato & Sobolewski, 2001).

Accordingly, many studies have examined the predictors and consequences of divorce; however, the majority of studies have focused on dissolution of first marriages. Few studies have examined predictors of divorce in remarriages (Ganong et al., 2006). The purpose of this study is to identify predictors of divorce in stepfamilies. Specifically, the quality of stepfamily relationships and mechanisms that link stepfamily relationship functioning to divorce will be examined. This knowledge is critical for decreasing the divorce rate in this vulnerable population and preventing the negative consequences associated with repeated divorce. In order to inform our understanding of divorce in stepfamilies, general theories of divorce will first be discussed and evaluated for their potential to explain divorce in stepfamilies specifically.

Theories of Divorce

Among the key theories put forth to explain divorce, social exchange theory and behavioural theory have garnered much support over the years (Rodrigues, Hall, & Fincham, 2006). Although these theories contribute largely to the understanding of marital satisfaction and stability\(^1\), neither provides a complete account of factors that

\(^1\) The terms *marital satisfaction, marital quality, marital adjustment, and marital distress* are used interchangeably throughout this paper to refer to spouses’ perceptions of their marriage. Similarly, *marital stability, dissolution, and divorce* are used to describe the outcome/status of marriages (Karney & Bradbury, 1995).
contribute to marital success. Recent theories have integrated the cognitive and behavioural principles that emerge from these theories with stress and coping processes in order to flesh out the context in which marital interactions unfold (Randall & Bodenmann, 2009). The contributions of each theory are discussed below.

**Social exchange theory.**

The social exchange theory of marital relationships is based on the notion that each spouse in a relationship is dependent on the relationship and its ability to fulfill his or her needs. This theory stems from Thibaut and Kelley’s (1959) comprehensive model of interpersonal processes, the theory of interdependence, and was applied to marriage by Levinger (1965). Levinger conceptualized marital cohesiveness as a special case of group cohesiveness. He proposed that the success of a marriage is dependent on the rewards of the relationship such as companionship and financial stability, the barriers to ending the relationship such as financial constraints and religious beliefs, and the presence of potential alternatives to the relationship such as independence and alternative partners. Dissolution would be likely to result in the case of low rewards, few barriers for terminating the relationship, and ample/attractive alternatives to the relationship (Rodrigues et al., 2006). Lewis and Spanier (1979) expanded this theory to include the concept of marital satisfaction in addition to stability. They proposed that marital stability is more influenced by the barriers that prevent dissolution and availability of alternative options whereas marital satisfaction is more dependent on the rewards of a relationship.
Empirical support exists for the social exchange theory. For example, Previti and Amato (2003) examined a large nationally representative sample and asked participants to provide the most important factors keeping their marriage together. They looked at the relationship between open-ended responses and marital satisfaction and stability. They found that those participants who reported rewards as the source of marital cohesion reported greater marital satisfaction. Participants who reported barriers reported poorer marital satisfaction and, even when controlling for marital satisfaction, were more likely to divorce across a 14-year time span. However, there are criticisms of this theory as well. Nakonezny & Denton (2008) argue that a basic premise of this theory is that an individual compares anticipated outcomes with past outcomes to judge the value of the relationship. This cognitive evaluation of current, past, and predicted outcomes leads to many of the criticisms of the theory. For example, Nakonezny & Denton argued that demarcating rewards and costs is a complex and individual process; what is rewarding to one may be punishing to another. In addition, even when rewards and costs are clearly identified, predicting the value of rewards relative to costs is often difficult to achieve. Often the value is not clear until after behavioural interactions have occurred and can be reflected upon. These criticisms raise doubt that human interaction in relationships could be fully explained by the rational process proposed in social exchange theory.

**Behavioural theory.**

The challenges inherent in studying the role of cognitive evaluations of marital interactions are overcome somewhat by behavioural theories of marriage. Behavioural theory posits that marital satisfaction is related to overt behaviour
exchanges between partners (for a review see Rodrigues et al., 2006). Much of the support for behavioural theories has come from marital problem-solving discussions. For example, Carrère and Gottman (1999) were able to reliably predict divorce over a 6-year period from exchanges that occur in just the first 3 minutes of conflict discussions among newlyweds. Stable marriages were characterized by less negative and more positive interactions. Successful marriages have been characterized by an approximate 5:1 ratio of positive to negative behaviours whereas unsuccessful marriages are characterized by a 1:1 ratio (Gottman, Coan, Carrere, & Swanson, 1998).

Clearly the balance of positive and negative behaviour exchanged in a couple is related to the success of the relationship; however, there are shortcomings in the behavioural theories of marital interactions. Bradbury and Fincham (1990) point out that overt behavioural exchanges are an important, but incomplete depiction of the relationship between marital interactions and relationship success. They argue that covert variables, namely affective and cognitive variables, are important determinants of marital success. They theorized that attributions underlie marital quality such that those couples in which negative attributions are used to explain a partner’s behaviour report greater marital dissatisfaction. Similarly, affective variables contribute greatly to marital functioning. Positive affect has emerged as an important predictor of marital functioning, one that can actually buffer the ill-effects of negative interactions. For example, low levels of positive affect in problem-solving discussions coupled with high levels of negative interactions (e.g., devaluation of partner, yes-but sentences, or denial of responsibility) predicted rapidly deteriorating marital satisfaction (Johnson
et al., 2005). However, increased positive affect buffered the detrimental effects of negative interactions. That is, couples displaying many negative behaviours during discussion, along with humor, affection, or interest/enthusiasm had indistinguishable marital satisfaction scores from those couples who demonstrated few negative interactions during discussion. Positive affect has an important role in offsetting negative interactions that are otherwise predictive of divorce. Taken together, it is clear that cognitive and emotional factors also play a role in the behavioural interactions that predict marital stability.

Behavioural theories of marital satisfaction have contributed greatly to what is known about marital success. However, they tend to focus narrowly on interactions that occur during problem-solving specifically without capturing the greater context in which those problem-solving interactions emerge and stable traits that affect their course (Karney & Bradbury, 1995; Lawrence et al., 2008). In addition, the strong focus on problem-solving interactions limits our understanding of other marital interactions that affect satisfaction such as supportive interactions. Two recent theories have taken a more inclusive approach by incorporating adaptational processes and enduring factors that exist outside of problem interactions. These models recognize the detrimental impact of stress on marital satisfaction and propose integrated frameworks for understanding the dyadic processes that help couples to maintain satisfying relationships and avoid divorce.

**The vulnerability-stress-adaptation model.**

The first of these models, the vulnerability-stress-adaptation (VSA) model, was proposed by Karney and Bradbury (1995). It conceptualizes marital outcomes as
more than just the result of problem-solving behaviours; pre-existing vulnerabilities, stressors that emerge, and adaptational processes are also included as key predictors of marital outcomes. Karney and Bradbury argue that this model improves upon behaviour theories in two important ways. First, it recognizes the variability in experiences across couples and second, it recognizes that life experiences prior to marriage influence the course of the marriage. Marital distress and dissolution are more likely when individuals have enduring vulnerabilities (e.g., problematic personality traits, family-of-origin vulnerabilities), stressful events (e.g., major events, chronic strain, normative change), and poor adaptive processes (e.g., defensive, hostile problem solving, lack of empathy). Karney and Bradbury theorized that the pathways between vulnerabilities, stress, adaptational processes, and marital satisfaction are reciprocal in nature. For example, the way in which couples respond to marital difficulties (e.g., adaptational processes) affects satisfaction, and satisfaction in turn affects the way in which couples cope with difficulties. The authors also proposed that non-marital outcomes such as depression or child adjustment are easily integrated into this model and may share reciprocal relationships with marital outcomes. Many pathways in this model have garnered considerable empirical support (Karney & Bradbury, 1995; Rodrigues et al., 2006).

**The stress-divorce model.**

Whereas the VSA model accounts for both major and minor stressors, the stress-divorce model (Bodenmann, 1995) focuses on daily, minor stressors, which have more consistently been found to predict marital outcomes relative to major stressors (Bodenmann et al., 2007). Bodenmann argues that minor stressors that
occur in everyday life are particularly detrimental because they can go unnoticed, leading to slow alienation between partners and gradual dissolution of marriage. This theory suggests that minor stressors that are external to the marriage (e.g., workplace stressors) can spillover into the marriage and bring about negative consequences by leading to less time spent together, poorer communication, increased physical and psychological difficulties, and exacerbated problematic personality traits (e.g., rigidity, hostility, anxiety). These pathways lead to mutual alienation, decreased marital satisfaction, and increased risk of divorce. In sum, this model proposes that marital distress often arises from chronic daily stress that is poorly handled (Bodenmann, 1995; Randall & Bodenmann, 2009).

**Theories of Divorce Applied to Remarriage**

Research conducted with first-marriage couples provides a strong foundation for understanding important elements of successful marriages—elements that extend to remarried couples too. However, Visher and Visher (1998) point out that first marriages and remarriages are not the same; in order to understand how remarriages unfold, they argue that the structural differences between nuclear families and stepfamilies must be considered. The key differences that have emerged in their extensive body of research include the following. First, parent-child relationships predate the formation of the couple relationship in stepfamilies. This requires that the couple relationship must form while parents maintain their longstanding, and often stronger, relations to their children. This is a reversal from that of traditional nuclear families in which the parental bond typically predates the existence of children. Second, stepfamilies often come together after the occurrence
of loss and change for adults and children alike. Third, adults and children in stepfamilies come together from different individual, marital, and family lifecycles. For example, one partner may enter the stepfamily with children from a previous union whereas the other partner may have never been married and have no children. Given the differing backgrounds of adults and children in stepfamilies, it follows that all will have differing expectations about family functioning that will be brought into the new family. Additional complications arise from the fact that children have biological parents in another household (or in memory, in the case of death) therefore children are often members of two households. This limits the autonomy of stepfamilies relative to first-marriages. Finally, stepparenting often comes with responsibilities, but without the same rights as biological parents. Stepparents are rarely provided the legal rights that biological parents have and there are inadequate social norms for stepparenting roles, both of which can limit their effectiveness in parenting. Similar arguments have been made by Cherlin (1978), who advanced the notion that remarriage is an incomplete institution. He argued that stepfamilies must solve problems that are unknown to other family forms and there are fewer norms to guide stepfamily functioning.

The substantial structural differences between stepfamilies and nuclear families discussed above suggest that couples enter remarriage with considerable vulnerability not typically present in first marriages. In addition, remarried couples may face more stress arising from the complexity of stepfamily living (Coleman et al., 2000). For example, the presence of children and stepchildren (e.g., Visher & Visher, 1998) may be considered a vulnerability given that remarried couples are more likely
to divorce when they bring children into the home (Amato, 2010). Children and stepchildren also give rise to potential sources on ongoing stress given that in all types of families, parent-child tension is the most frequently reported type of tension, more so than marital tension (Margolin, Christensen, & John, 1996). Also, children are a frequent topic of conflict between married partners. For example, in a community sample of husbands and wives who reported on naturally occurring conflicts within the home, it was found that the frequency of marital conflicts about children far exceeded the frequency of any other conflict topic (Papp, Cummings, & Goeke-Morey, 2009). Both husbands and wives reported that almost 40% of conflicts focused on children whereas the next most common conflict topics were chores (approximately 25%), communication (approximately 22%), work and money (both approaching 20%; Papp et al., 2009). In a large, nationally representative study comparing stepfamilies and nuclear families, money was the most frequent conflict topic in nuclear families whereas children were the most frequent topic of conflict reported in stepfamilies (Stanley, Markman, & Whitton, 2002). Finally, in previous analyses with the current sample of stepfamilies, Lee-Baggley, Preece, and DeLongis (2005) found that over 50% of stepfamily stressors were related to children. Disagreements about child behaviour, the distribution of resources to children, and co-parenting decisions are among the most common sources of conflict in stepfamilies (Hobart, 1991; Lee-Baggley et al., 2005) and greater conflict in stepfamilies has been suggested to contribute to higher divorce rates in stepfamilies (Hobart, 1991).
In order to understand divorce in stepfamilies, perhaps more so than in nuclear families, it may be important to move away from theories focused entirely on *couple* interactions. Instead, drawing from the stress-divorce model (Bodenmann, 1995) and the VSA model (Karney & Bradbury, 1995), it seems important to also consider vulnerabilities and chronic stressors, such as those arising from complex stepfamily relationships that bear influence on couple interactions within stepfamilies. Indeed, data from earlier phases of the current stepfamily study demonstrated that individualistic approaches to understanding stress adaptation had limited utility in describing family outcomes that instead evolved from systemic, interdependent family processes (Preece & DeLongis, 2005).

**The Stepfamily System**

It was described above that stepfamily members often come together from different life stages and new step-relations must form alongside the developing marital relationship, and alongside pre-existing parent-child relationships. Following from this, (step)parent-child relationships have been the focus of much of the research aimed at understanding stepfamily functioning, and family systems theory has been the most frequent theory used in studies of stepfamily relationships (Robila & Taylor, 2001). As reviewed in Cox and Paley (1997), key principles underlying family systems include the conceptualization of families as a whole, with the whole being greater than the sum of its parts. Second, the family system has a hierarchical structure that contains nested subsystems. And finally, the family system adapts to changing conditions in the environment as well as to changes within the system. This theory has been used to understand the interdependence of stepfamily
members and the complexity of relationships between members (Schrodt, Soliz, & Braithwaite, 2008). Interdependence suggests that each family member affects, and is affected by, other elements of the family system. The complexity of relationships arises from the various subsystems that make up the family system. A family systems approach would typically focus on subsystems including the husband-wife (marital) dyad, father-child dyad, mother-child dyad, and sibling dyads to describe the family system. Stepfamily subsystems are more complex given the addition of stepparent-child dyads, stepsibling dyads, and partner-ex-partner dyads. As a result, it has been argued that the relationships between family dyads may be particularly important in stepfamilies (Fine & Kurdek, 1995; Guisinger, Cowan, & Schuldberg, 1989). Therefore, to understand remarriage outcomes, this investigation focuses not only on the relationship within the couple, but also reciprocal relationships between the couple and other stepfamily dyads.

**The starting point: The marital dyad.**

First and foremost, satisfaction within the marital dyad itself is expected to be a strong predictor of subsequent marital outcomes based on decades of research that have established a positive relationship between marital quality and marital stability (see Karney & Bradbury, 1995; Rodrigues et al., 2006 for reviews). However, given that levels of marital quality have been found to be comparable across first-marriages and remarriages, yet remarriages are at greater risk of divorce, it becomes increasingly important to examine factors other than marital quality that may help to explain this increased rate of divorce in remarriages (Whitton, Stanley, Markman, & Johnson, 2013). Additional factors have been found to attenuate the
relationship between marital quality and divorce such as the duration of the marriage, attitudes and beliefs about marriage, insecurity, gender, and race (Rodrigues et al., 2006; Whitton et al., 2013). The influence of stepfamily relationships may also attenuate remarriage outcomes; however, there is very little literature to address the broader stepfamily context in which remarriages exist. This is not surprising given that the literature on marital dissolution is heavily weighted on studies of first-married couples, and often on young newlywed couples specifically (e.g., Carrere & Gottman, 1999; Gottman et al., 1998; Huston, Caughlin, Houts, Smith, & George, 2001; Johnson et al., 2005). For example, Karney and Bradbury (1995) reviewed 115 studies addressing marital satisfaction and stability and found that 33% were based on newlywed samples, often as a way to hold constant marriage duration within the sample. Following from this, the current study investigates the quality of the marital relationship itself as a predictor of subsequent divorce but also takes into account the broader stepfamily system that has not been well researched in the divorce literature.

**The stepfamily context: Parent-child dyads.**

Understanding the relationships between family subsystems is imperative because problems with children often co-occur with marital problems (Fine & Kurdek, 1995). In the broader developmental literature, there is an abundance of research that examines the relationship dynamics between parents and children. However, the majority of studies have focused on the unidirectional influence from the parent to the child, with less attention to the fact that children also actively influence parents (Schermerhorn, Chow, & Cummings, 2010). This is overwhelmingly true in stepfamily research as well; that is, there is a wealth of research examining the
effects of stepfamily life on child outcomes, but much less research that examines the role of children in stepfamily or remarriage outcomes (Sweeney, 2010). Although the developmental literature on the reciprocal nature within parent-child dyads is increasing, Cox and Paley (2003) argue that family systems theory calls not only for the examination of reciprocal relationships within dyads, but also across dyads. That is, they suggest that it is important to look at the reciprocal relationship between the marital dyad and parent-child dyad.

Turning first to the broader developmental literature, the adverse effect of conflict within the marital dyad on the parent-child dyad has been well established (reviewed in Cummings & Davies, 1994). For example, a recent study demonstrated the effects of marital discord on parent-child relationships using an experimental design. Kitzmann (2000) enlisted 40 couples to participate in pleasant and conflictual discussions in a lab setting. Immediately following these discussions, parents were observed while they interacted with their children (who had not been present during the parent discussions). Parents demonstrated more negative parenting following conflict discussions (as opposed to positive discussions), and the level of negativity in the parent discussion predicted the level of negativity in the parent-child interactions, regardless of whether the parent discussion topic had been the positive or conflictual topic. These findings support the spillover hypothesis that has often been used to describe the interdependence of family subsystems (e.g., affect and behaviour in one family subsystem can spread to other family subsystems). Additional evidence of spillover from the marital dyad to the parent-child dyad as well as spillover from the
marital dyad to triadic interactions (mother-father-child interactions) has also been found by Stroud, Durbin, Wilson, and Mendelsohn (2011).

Although most studies examine spillover from the marriage to other family subsystems, some evidence of tension spillover from parent-child and sibling dyads, to the marital dyad has been found by studying daily tension events within families (Margolin et al., 1996). A small number of studies have also examined the longitudinal effects of parent-child interactions on the marital dyad. Schermerhorn, Cummings, DeCarlo, and Davies (2007) followed a community sample of families over a two year period and found that children’s tendency to respond to marital conflict with agentic behaviour (e.g., helping efforts aimed at diffusing the conflict) predicted decreased marital conflict one year later (while controlling for previous marital conflict levels). In contrast, children’s tendency to respond to marital conflict with behavioural dysregulation (e.g., aggression, misbehaving) predicted increased marital conflict one year later (controlling for previous marital conflict). In a more recent study that required participants to record data for each naturally occurring marital conflict within a 15-day period, Schermerhorn, Chow, and Cummings (2010) found that child behaviour that occurred in response to marital conflict episodes predicted the nature of resolution within the same conflict. That is, children’s agentic interactions with their parents were related to better marital conflict endings and children’s negative emotions and behaviour dysregulation were associated with poorer marital conflict endings. Taken together, these authors suggest that these two studies show how children’s behaviour affects marital interactions on a daily basis.
and that over time, these transactional family dynamics may accumulate and explain longitudinal effects of child behaviour on marital discord.

Further evidence that children exert an influence on marital quality and stability is found in diverse areas of the developmental literature. For example, research on families in which a child has attention-deficit hyperactivity disorder (ADHD) have found that these families experience more stressful and conflicted family environments relative to control families (Johnston & Mash, 2001), which is similar to contrasts made between stepfamilies and nuclear families, respectively. Parents of children with ADHD typically report lower marital satisfaction and higher conflict levels, though there is some inconsistency in this field (Johnston & Mash, 2001). Similarly, parents of children with ADHD are almost twice as likely to divorce by the time their children reach the age of eight and are more likely to divorce earlier than parents of children without ADHD (Wymbs et al., 2008).

The effect of parent-child interactions on marital discord has been further established in experimental studies in the ADHD literature. For example, Wymbs and Pelham (2010) studied parents while they interacted with child confederates who acted out either disruptive (“ADHD-like”) or typical (developmentally appropriate) child behaviour. They found that communication between married partners was less positive and more negative during and after lab-based interactions with disruptive child confederates. In a more recent study, Wymbs (2011) studied the potential mechanisms that link child behaviour to marital discord. He found that negative parenting behaviour partially mediated the link between disruptive child behaviour and marital discord. Child behaviour also predicted parent affect; however, parent
affect did not predict marital discord and therefore did not mediate the relationship between child behaviour and marital discord. As the author noted, this was surprising given that the broader literature on parent affect has demonstrated associations with long term marital stability (e.g., Butterworth & Rodgers, 2008; Carrere & Gottman, 1999; Gottman et al., 1998; Gottman & Levenson, 2000; Rodrigues et al., 2006).

Taken together, there is increasing evidence that parent-child interactions affect the marital dyad in any family type. However, there is even stronger reason to expect that parent-child relationships in stepfamilies, specifically, may influence marital outcomes. For example, research has demonstrated increased divorce rates when children from a previous union are brought into a home (Amato, 2010). Further, children in stepfamilies demonstrate increased internalizing and externalizing behaviour (Coleman et al., 2000), with child behaviour being linked to marital satisfaction and stability in numerous studies reviewed above. Only one study has been conducted that addresses the longitudinal effects of child behaviour on marital functioning in stepfamilies specifically. In a representative sample of both biological families and stepfamilies who were followed prospectively, it was found that child externalizing behaviour predicted increased marital conflict over time (Jenkins, Simpson, Dunn, Rasbash, & O’Connor, 2005). There were two important qualifications for this effect, however. First, this effect of externalizing behaviour was only found in families with average levels of externalizing behaviour that fell in the medium or high range, but not for families who on average, had low levels of child externalizing behaviour across children. Second, the effect of externalizing behaviour
on marital conflict was stronger in stepfamilies. Taken together, these data suggest that the overall dynamic in the family system influences the degree to which child behaviour predicts marital conflict, and that child behaviour may have a stronger effect on the marriage in stepfamilies relative to biological families.

Research comparing the quality of relationships between parents and children in nuclear and stepfamilies has demonstrated poorer relationships between parents and all children within stepfamilies (e.g., biological and step; Fine, Voydanoff, & Donnelly, 1994). However, based on obvious differences between stepparent-child and biological parent-child relationships such as lack of biological ties and shared history, the stepparent-child relationship faces particular challenges. For example, Belsky (1979) argued that a stable marital relationship provides the foundation for family functioning. Given that the stepparent-stepchild relationship must form concurrently with the relationship that is forming between remarrying partners, it does not benefit from a preceding stable marital relationship, which is often in place when children are born into a nuclear family. Stepparents can also be placed in competition with biological parents; this reason is often cited to explain the consistent finding that stepmother-child relationships face more difficulty than all other step-relations, including stepfather-child relationships (Ihinger-Tallman & Pasley, 1997). Ihinger-Tallman and Pasley theorized that stepmother-child relationships are more difficult because biological mothers remain more involved than biological fathers, which can create conflicting roles for mothers and stepmothers. Consistent with these findings, data from previous phases of the current study revealed that
stepparent-child relationships were characterized by less closeness and more
tension relative to biological parent-child relationship (DeLongis & Preece, 2002).

Given the unique circumstances of the stepparent-child dyad, it is not
surprising that research has found a relationship between this dyad and marital
outcomes. In a cross-sectional study comparing relationship quality across family
dyads, Fine and Kurdek (1995) found that the quality of both biological and
stepparent-child relationships were correlated with the quality of the marital
relationship; however, this correlation was stronger for stepparent-child relationships
relative to biological parent-child relationships. Of note, Fine and Kurdek used a
cross-sectional design and therefore the direction of these correlations is unclear.
Although it may be the case that the quality of (step)parent-child relationships
contributes to the quality of the marriage, it could just as easily be the case that
distress in a marital relationship could spill over and decrease the quality of the
relationship between stepparents and stepchildren in particular, and to a lesser
extent, biological parents and children.

Guisinger and colleagues (1989) studied divorced fathers and their new wives
during the initial three years of remarriage to identify determinants of changing
marital quality. They found that difficulty in stepparent-child relationships was related
to lower concurrent and declining marital satisfaction over the 3-year assessment
period. However, biological parent-child relationships also predicted concurrent and
declining marital quality. The difficulties between (step)parents and (step)children
were assessed in numerous ways; poorer marital satisfaction after 3 years was
related to higher resentment/less positivity toward (step)children, lower optimism
about (step)parenting, higher evaluations of problem behaviour in the child, and unsatisfactory division of labour around household and parenting roles. However, when Time 1 marital satisfaction was controlled, none of these stepfamily variables remained significant predictors of Time 2 marital satisfaction.

Although Guisinger et al. (1989) identified stepfamily variables that predicted changes in marital satisfaction over time, there were limitations in this study worth noting. First and foremost, the sample size was very small ($N = 17$ couples followed prospectively). Given this small sample size, it is likely that there was insufficient power to detect prospective predictors of marital quality, beyond the effect of initial levels of marital quality. Further, the short timeframe for this longitudinal study did not permit the measurement of divorce as an outcome. However, studying marital quality is an important path to understanding the factors that may contribute to remarriage stability.

**From Stepfamily Context to the Marital Relationship: Mediating Factors**

The longitudinal research design in the current study not only provides a sufficient timeframe to assess marital stability outcomes, it also permits an investigation of mechanisms through which the stepfamily system may influence remarriage outcomes. Fine, Voydanoff, and Donnelly (1994) identified depression and marital quality as potential mediators in stepfamily outcomes. They proposed that when parents have low levels of depression and high levels of marital quality, they may be better able to cope with the challenges encountered in stepfamily life. Following from this, these factors will be investigated as potential mediators of the effects of (step)family relationship quality on divorce outcomes.
Given the findings of Fine and Kurdek (1995) and Guisinger (1989) which relate the quality of (step)parent-child relationships to marital quality, and the large literature linking marital quality to marital stability, the first mechanism through which (step)family relationship quality may predict divorce is through declining marital quality. This is an important mechanism to investigate given that marital quality is examined as an outcome much more frequently than marital stability and with a common assumption being that declining marital quality may subsequently predict divorce. This assumption will be investigated directly in the current study by examining the meditational effect of Time 2 marital quality on the prediction of divorce from the quality of Time 1 (step)family relationships. It is expected that family relationships will predict significant changes in marital quality and that declining marital quality will be a mechanism through which poor family relationships contribute to divorce at Time 3.

Based on a broad literature linking marital quality to psychopathology, a second mechanism through which the effects of (step)family functioning may predict divorce is psychopathology. In a nationally representative American sample, bivariate correlations have been found between multiple psychiatric disorders and marital dissatisfaction (Whisman, 1999). These associations between marital dissatisfaction and psychopathology were attenuated by comorbidity, suggesting that marital dissatisfaction was largely predicted by an increased level of psychological distress rather than specific psychological difficulties per se. However, both major depressive disorder and dysthymia remained significantly associated with marital dissatisfaction even when controlling for other comorbid disorders. This suggests a
particularly robust relationship between mood disorders and marital quality (Whisman, 1999).

Decades of research has revealed that depressive symptoms and clinical levels of depression can both contribute to and be the result of poor marital relationships (for comprehensive reviews see Gotlib & Beach, 1995; Rehman, Gollan, & Mortimer, 2008). For example, in a community sample of married individuals, marital dissatisfaction predicted the onset of a major depressive episode (Whisman & Bruce, 1999). Dissatisfied spouses in this study were almost three times more likely to develop a major depressive episode within a 12-month follow-up period which, as the authors point out, suggests that marital dissatisfaction may be etiologically linked to depression. Support for the opposite direction, the effect of depression on marital quality, has also been found. For example, Whisman (2001) found significant improvements in levels of marital satisfaction following treatment for depression in a multicenter clinical trial. In this study, change in depression levels over the course of treatment mediated the change in marital satisfaction. This effect was robust to the type of treatment provided (interpersonal therapy, cognitive therapy, or pharmacotherapy with imipramine).

Depressed spouses demonstrate fewer positive behaviours, more negative behaviours, and poorer interpersonal functioning in their marital relationships (Gotlib & Beach, 1995; Rehman et al., 2008). Further, depression specifically and psychopathology more broadly is associated with a higher risk of divorce (e.g., Butterworth & Rodgers, 2008; Rodrigues et al., 2006). Poorer interpersonal functioning is not limited to relationships with spouses; depressed individuals
demonstrate more hostility and anger toward their children and demonstrate poorer social skills in interactions with strangers (Gotlib & Beach, 1995). Based on this literature, it is expected that depressive symptoms will predict divorce in the current study and will be a mechanism through which poor quality marital and (step)parent-child relationships affect divorce outcomes.

**The Current Study**

Marital researchers have developed comprehensive theories that help us to understand the complex interplay of factors that contribute to divorce. Similarly, stepfamily research has documented many of the complexities that challenge stepfamily functioning. However, very little research has examined the intersection of these two fields. Consequently, the goal of the current study is to investigate the influence of the complex stepfamily system on marital outcomes in remarriages. The objectives of this study are twofold. First, the effect of parent-child relationship quality on marital outcomes in stepfamilies will be investigated. Research in nuclear families has found that parent-child relationship factors predict marital outcomes (e.g., Margolin et al., 1996; Schermerhorn et al., 2010; Schermerhorn et al., 2007; Wymbs, 2011; Wymbs et al., 2008; Wymbs & Pelham, 2010). In stepfamilies, specifically, stepparent-child relationship factors have been found to be stronger predictors of marital quality relative to biological parent-child relationship factors (e.g., Fine & Kurdek, 1995; Guisinger et al., 1989; Jenkins et al., 2005). The current study will add to the literature by examining the relationship between biological and stepparent-child relationship quality and divorce, whereas most studies examined marital quality as the key outcome variable. The effect of parent-child relationships
on remarriage outcomes will be examined within the context of the quality of all family relationships. That is, interactions between the quality of biological parent-child relationships, stepparent-child relationships, and the marital relationship will be examined. Second, mechanisms through which the quality of Time 1 family relationships predicts divorce will be examined. Specifically, Time 2 marital quality and depressive symptoms will be investigated as mediators of the effects of Time 1 parent-child and spousal relationship quality on divorce.

This study is grounded in both family systems theory as well as two theories of divorce: the VSA model proposed by Karney & Bradbury (1995) and the stress-divorce model proposed by Bodenmann (1995). The VSA model allows latitude to investigate pre-existing vulnerabilities that couples bring into a marriage and both of these models propose mechanisms (e.g., the development of depressive symptoms) through which stressors that are external to the marriage itself can spillover into the marriage and contribute to marital dissolution. In the current study, (step)children are considered a potential vulnerability that remarrying individuals bring into their marriages and poor quality family relationships will be examined as a potential source of stress with which stepfamilies must cope. Based on these objectives the main hypotheses include:

1) Consistent with findings of past research (e.g., DeLongis & Preece, 2002; Ihinger-Tallman & Pasley, 1997), it is predicted that parent-child relationship quality will differ significantly between stepparent-child relationships and biological parent-child relationships. Specifically, stepparent-child relationships
are expected to be characterized by more tension than are biological parent-child relationships.\textsuperscript{2}

2) It is predicted that higher levels of stepparent-child tension measured at Time 1 of this study will predict increased probability of divorce at Time 3, while controlling for initial marital quality, which is also expected to predict divorce. However, it is predicted that the effect of stepparent-child relationship quality on divorce will be moderated by the quality of other family relationships. Therefore stepparent-child relationships will be considered within the context of the quality of biological parent-child relationships and the quality of the marital relationship. It is predicted that stepparent-child tension will interact both with biological parent-child tension as well as marital quality to predict divorce.

3) Finally, indicators of poor adaptation are expected to mediate the relationships between measures of Time 1 family relationship quality and divorce. Specifically, decreased marital quality and increased depressive symptoms (Fine et al., 1994) at Time 2 are mechanisms through which strained family relationships are expected to predict subsequent divorce.

\textsuperscript{2} Poorer stepparent-child relationship quality, relative to biological parent-child relationship quality was demonstrated in previous analyses of data from this stepfamily study (DeLongis & Preece, 2002). However, the subset of data for the current analyses differs from data analyzed in previous research due to the selection of different variables as well as attrition. Therefore the difference in stepparent and biological parent-child relationship quality will be replicated with the current data set to confirm this expected relationship.
Method

Overview

Data from the current study were drawn from a larger, multi-method prospective study of psychosocial processes in stepfamilies (DeLongis, Capreol, Holtzman, O'Brien, & Campbell, 2004; DeLongis & Preece, 2002; Lee-Bagley et al., 2005). Time 1 data collection occurred in 1991 and was comprised of structured telephone interviews, a battery of questionnaires, and structured daily-diaries. Time 2 data collection occurred two years after Time 1 and included re-administration of the telephone interview and daily-diary. Time 3 data was collected via brief telephone interviews 20 years after Time 1, and the analyses presented here are the first examining these data. All predictor variables in this study were assessed during the Time 1 and 2 telephone interviews whereas the outcome variable—marital status—was assessed during the Time 3 telephone interviews. Only the procedures and measures that are germane to the current study will be discussed here.

Participants

Participants were recruited at Time 1 by means of newspaper and radio advertisements, school newsletters, posters on community bulletin boards, and solicitation at local stepfamily groups. Interested participants were asked to telephone The Centre for Health and Coping Studies at the University of British Columbia and were then assessed for eligibility. For inclusion in this study it was required that participants were married, or had been cohabitating for at least one
Further, it was required that at least one child from a previous union be living in the home at least 25% of the time, thus forming a stepfamily. Participation was also limited to individuals who were fluent in English given that interviews and paper-and-pencil measures were all presented in English.

The initial sample size at Time 1 consisted of 154 couples (308 individuals). Given the 20 year time period between Time 1 and 3, we anticipated losing participants to attrition and took the following steps to improve our contact rates (Hunt & White, 1998). First, we used online search resources to update our database of contact information (e.g., Canada 411 People Search). Next, we attempted to make contact by phone and then by mail. Failing this, we also attempted to obtain updated contact information from the “contact person” specified by each participant at Time 1. The contact person was a close friend or relative who was specified during the initial phase as an individual who would always be able to provide information about the location of participants. Persistent effort resulted in successfully contacting 106 couples at Time 3. Following standard methods used in large longitudinal studies (e.g., Alameda County Study; Kaplan, Seeman, Cohen, Knudsen, & Guralnik, 1987), public registries were used to obtain additional outcome data when possible (Hunt & White, 1998). By accessing public divorce records, six additional couples were confirmed to be divorced (the key variable of interest collected at Time 3). Therefore, the final sample size at Time 3 was 112 couples (73% of the original sample). Of the

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3 In recent decades, marriage rates have declined in intimate partnerships and instead, parenthood with cohabitation is becoming increasingly common. Following from this, there is also a trend of increasing rates of re-partnership (e.g., forming a stepfamily through cohabitation) rather than actual remarriage (Statistics Canada, 2008; Sweeney, 2010). Recent Canadian data shows that parents in stepfamilies were over three times more likely to be living in a common-law relationship relative to parents in nuclear families (Statistics Canada, 2012).
42 remaining couples, 12 had declined further participation at Time 2 and to respect their wishes, no attempt was made to contact them at Time 3. Attempts to contact the remaining 30 couples at Time 3 were unsuccessful.

In order to assess the effects of attrition, demographic and study variables collected at Time 1 and Time 2 were compared for Time 3 completers vs. non-completers. Only one significant difference was found; Time 3 completers had more male children (62% male children) when compared to Time 3 non-completers (46% male children; \( t(150) = -2.70, p = 0.009 \)). No significant differences were found between Time 3 completers and non-completers for: stepfamily type (stepmother, stepfather, or complex/stepmother and stepfather families); average age of children; average level of (step)parent–child tension; total number of children in the family; number of biological or stepchildren; presence of mutual children; Time 1 or 2 depressive symptoms for wives or husbands, Time 1 or 2 marital quality for wives, husbands, or averaged across both partners; marital status at Time 1 (e.g., married vs. cohabitating); duration of marriage or cohabitation at Time 1; number of previous marriages; participant age; education; employment status; or income.

The following characteristics describe the final sample of 112 couples who completed all three time-points. The mean age of the sample at Time 1 was 39.6 years with a range from 27-50 years. Husbands were significantly older than wives \( (M = 41.04 \text{ and } M = 38.59, \text{ respectively, } t(111) = 3.88, p < .001) \), which is typical of remarriages (Booth & Edwards, 1992; Ni Bhrolchain, 1992). Seventy-six percent of the sample was Canadian-born with the remainder comprised of individuals from
primarily English speaking countries. The typical participant had a middle class standard of living with education and income levels that were comparable to the average levels for residents of the lower mainland of British Columbia at the time of data collection (Statistics Canada, 1995). The mean education level was 14 years, ranging from 10-17 years and the median annual family income was $75,000/year. Husbands earned significantly more personal income than wives ($M = $54,382 and $M = $25,588, respectively, $t(111) = 7.03, p < .001$) but there was no gender difference in education level.

Seventy-seven percent of the participants were married at Time 1. These participants had been married to their partners for 3.3 years on average (range = 1-16 years) and had lived with their partners for an average of 4.9 years (range = 1-16). The remaining 23% of participants were living in a common-law relationship and had lived with their partner for an average of 4.1 years (range = 1-10 years). Most individuals had been married previously; 81% of individuals reported one previous marriage and 12% reported two or more previous marriages. The large majority of these previous marriages ended in divorce; only 5% of the husbands and 2% of wives had been widowed.

Stepfamilies represent a very heterogeneous group with regard to custodial arrangements of children. Twenty (17.9%) of the families in this sample were stepmother families, 41 (36.6%) of the families were stepfather families, and 51 (45.5%) of the families were complex stepfamilies (e.g., both adults had both biological and stepchildren in the home). Although data pertaining to all children in each family was collected, only children 2-18 years of age were included in the
sample for the current study. Infants were excluded from the current analyses because relationship quality with infants lacked variability. These relationships were described as uniformly close and lacking tension. Adult children were excluded from the analyses once they reached the age of majority in British Columbia (19 years of age) because they spent little if any time in the home and had typically not grown up with their stepparents. The average number of children in each stepfamily was 3.9 (range = 1 to 10 children). The average age of the children included in analyses was 11 years ($SD = 4.1$ years).

**Procedure**

Aspects of the procedures for Time 1 and 2 are discussed elsewhere (see DeLongis et al., 2004; DeLongis & Preece, 2002; Lee-Baggley et al., 2005) but the methods that are directly relevant to the current study are described in detail here. In the initial phase of the study, interested couples who met eligibility criteria were mailed a brief summary of the research goals and procedures, a consent form, and a preliminary form that assessed demographic variables. Those participants who returned their consent forms were contacted to complete a telephone interview.

The interviews were conducted by trained, female undergraduate students and were audiotaped, with the permission of participants, for accurate coding of open ended-questions and assurance that standardized procedures were being followed. The telephone interviews were conducted separately with each member of the couple. These interviews assessed marital quality, parent-child relationship quality, stress, coping, social support, psychological well-being of parents and children, physical health, challenges related to living within a stepfamily context, and
demographic variables but only those variables that are directly relevant to the current study will be described in the Measures section.

Participants were contacted again two years after their initial interview and invited to participate in Time 2. Participants underwent telephone interviews that followed the same protocol and assessed the same constructs as in Time 1. In the current study, marital quality and depression scores were the only Time 2 variables of interest.

Finally, participants were contacted 20 years after the start of the study and invited to participate in Time 3. As noted above, numerous methods were used to re-locate as many participants as possible. Time 3 included brief telephone interviews that assessed marital status (e.g., married or divorced), marital quality (for participants who were still married), and reasons for divorce (for those participants who had divorced). Like the other phases, interviews were conducted by a trained, female undergraduate interviewer and the interviews were audio-recorded for accuracy of data collection and assurance of standardized procedures.

Measures

Time 1 interview measures.

Marital quality. The Dyadic Adjustment Scale (DAS; Spanier, 1976) is a 32-item scale that has been widely used to measure marital adjustment in married and unmarried cohabitating couples. This scale is theoretically grounded, valid, and reliable; Chronbach’s alpha for the original validation study was very high ($\alpha = 0.96$; Spanier, 1976). Chronbach’s alpha in the current study was also high ($\alpha = 0.91$). The scale items address qualities of the marital relationship including satisfaction,
cohesion, consensus, and affectional expression. For example, participants are asked to rate the extent of their dyadic agreement or disagreement on issues such as “aims, goals, and things believed to be important” and “sexual relations.” Some items require participants to rate the frequency of relationship events (e.g., “how often do you or your partner leave the house after a fight” and “how often do you calmly discuss something”). The large majority of items are designed to assess relationship adjustment of the dyad as a whole rather than the individual’s personal adjustment to the relationship. As such, it has been suggested that differences in partners’ ratings can be construed as differing perceptions of the couple’s relationship functioning (Spanier, 1976).

Given that the DAS is intended to assess the relationship functioning of the dyad as a whole, it is reasonable to consider husbands’ and wives’ scores on this measure as two independent ratings of the same construct. Past research has demonstrated that partners’ independent ratings of marital quality made with numerous measures tend to be highly related, with correlations typically ranging from 0.40 to 0.80 (Watson, Hubbard, & Wiese, 2000). Consistent with this, husbands’ and wives’ marital quality scores were very highly correlated with each other in our sample (Time 1 husbands’ and wives’ marital quality: \( r = 0.70, p < .001 \); Time 2 husbands’ and wives’ marital quality: \( r = 0.69, p = < .001 \)). Based on these high correlations, husbands’ and wives’ marital quality scores were aggregated to produce one marital quality score for the couple. This decision was made in order to reduce the number of variables in each model, improve power, reduce the effects of multicollinearity that arise from including highly correlated variables in the same
model, and improve the reliability of this score by combining two independent ratings of the construct for each couple.  

The following minor changes were made to the instructions of the DAS to make it appropriate for telephone administration. The original measure had participants rate their responses on a 5-point Likert scale for two items, a 6-point Likert scale for 27 items, a 7-point Likert scale for one item, and two questions required dichotomous (yes-no) responses. In contrast, a uniform response scale was used in order to facilitate delivery of this questionnaire by phone. Consistent with the remainder of scales included in the phone interview, we asked participants to rate their responses on a 5-point Likert scale (1 = *never disagree* to 5 = *always disagree*). Three items were removed to decrease redundancies and increase the brevity of the telephone interview; these items included “How often do you disagree over matters of recreation?”, “How frequently do you and your partner engage in outside interests together?” and “Which of the following statements best describes how you feel about the future of your relationship?”

**(Step)parent-child tension.** The quality of relationships between (step)parents and children was assessed by asking each husband and wife to rate their level of tension with each of their children and stepchildren. Tension was chosen specifically as a measure of parent-child relationship quality based on a large literature that has revealed stronger, more persistent, and more reliable effects of

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4 In addition to the analyses reported below in which Marital Quality was measured at the couple level, all hypotheses were also tested with a set of analogous models that included Wives’ Marital Quality instead of the couple average, and another set of analogous models including Husbands’ Marital Quality. Results for models including Wives’ or Husbands’ Marital Quality were identical to results presented below, with one exception that is noted (e.g., a significant stepparent-child tension x marital quality interaction was found for husbands but not wives, as described below).
negatively valenced constructs relative to positively valenced constructs when predicting diverse psychological outcomes (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

(Step)parent-child tension was rated on a 5-point Likert scale where 1 indicated that the relationship was “not at all tense” and 5 represented “very tense.” (Step)parent-child tension scores were aggregated across children within each family to provide one rating of the average level of tension with biological children and one rating of the average level of tension with stepchildren in each family.\(^5\) Whereas many studies of stepfamilies select a single target biological and stepchild to represent all (step)children within a family, the current study used mean (step)parent-child score to capture family tension levels in a parsimonious, easily interpretable manner.\(^6\)

**Depressive symptoms.** The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) is a brief, 20-item self report inventory that was developed to assess depressive symptoms in the general population. This scale is theoretically grounded, valid, and reliable. Chronbach’s alpha ranged from $\alpha = .85$ to .90 in patient and general population groups tested during scale development.

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\(^5\) “Mutual children,” or children that were biological to both adults in the couple, were included in the sample of biological children. There were insufficient families ($N = 28$) with mutual children to allow analysis of parent-child relationships with mutual children as a third parent-child relationship type. However, the effect of including mutual children was explored by conducting all analyses with and without mutual children included in the biological sample; all results were the same in both cases. The fact that including mutual children in this sample did not change the results is consistent with research by Ganong and Coleman (1988). They found that families with and without mutual children did not differ with respect to marital satisfaction, biological or stepparent-child relationship quality.

\(^6\) In addition to the analyses presented in the results section that are based on mean (step)parent-child tension scores, the highest and lowest biological- and stepparent-child tension scores in each family were selected as target scores to capture the spread of scores within each family. All analyses were re-run with each of these high and low target tension scores; the pattern of results for target analyses was the same as the results that are based on mean (step)parent-child scores, with slight variations in statistical significance of some target score analyses. Key analyses are included in Appendix A.
(Radloff, 1977) and was $\alpha = .92$ in the current study. Items assess affective (e.g., “I felt that I could not shake off the blues even with help from family and friends”), cognitive (e.g., “I had trouble keeping my mind on what I was doing”), and physical (e.g., “My sleep was restless”) aspects of depression. Participants are asked to rate how often they experience the symptoms using a scale from 0 (“rarely or none of the time”) to 3 (“most or all of the time”). Four items are reversed scored prior to summing all items to produce a total score ranging from 0-60. A cutoff score of 16 or higher has been largely used to indicate clinically significant levels of depressive symptoms (Radloff, 1977). This scale was administered following the standard procedures with one small change; participants were asked to rate the items on a scale of 1 to 4 (rather than 0 to 3) so that this rating scale was more consistent with the rating scales used throughout the phone interview. However, scores were converted back to the 0 to 3 scale prior to analysis to allow interpretation of the raw scores.

**Demographic variables.** Demographic data were assessed by self-report during the Time 1 interviews for use as control variables. The demographic variables assessed include: age of husbands and wives, education of husbands and wives, family income, duration of marriage, duration of cohabitation, whether the couple was legally married or living in a common-law relationship, numbers of biological children/stepchildren/mutual children/and total children, child age, and stepfamily type (stepmother family, stepfather family, or complex family).
Time 2 interview measures.

**Marital quality.** The Dyadic Adjustment Scale (DAS; Spanier, 1976) was re-administered during the Time 2 interview, following the same protocol described above.

**Depressive symptoms.** The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was re-administered during the Time 2 interview, following the protocol described above.

Time 3 interview measures.

**Marital status.** Marital status (with reference to their partner from Time 1) was assessed via brief phone interviews. Participants indicated whether they were currently 1) Married, 2) Divorced, 3) Separated, or 4) Widowed from their partner at Time 1. Among the couples who could not be reached by phone or mail, six additional couples were confirmed as divorced by accessing public divorce records (Hunt & White, 1998).
**Results**

**Completion Rate and Descriptive Statistics**

As noted above, Time 3 data were obtained for 112 couples (73% of the original sample of 154 couples); these 112 couples comprised the sample for the following analyses, unless otherwise noted due to missing data. Seventy (62.5%) of these couples were still married (or remained in their common-law relationship) whereas 42 (37.5%) had divorced (or permanently separated from their common-law partner). Means and standard deviations (SD) for Time 1 and 2 predictor variables are shown in Table 1. Paired-samples t-tests revealed that stepparent-child relationships were characterized by significantly more tension relative to biological parent-child relationships. Wives and husbands did not differ on levels of marital quality at Time 1 or 2, nor did they differ on levels of depressive symptoms at Time 1. However, wives endorsed significantly higher levels of depressive symptoms at Time 2 when compared to husbands. Consistent with community samples, the average level of depressive symptoms endorsed by both husbands and wives at both time-points falls below the traditional CES-D cutoff score of 16 that is used to indicate clinically significant levels of depressive symptoms (Radloff, 1977). Paired-samples t-tests also revealed that neither marital quality nor depressive symptoms changed significantly from T1 to T2 for either wives or husbands. Bivariate correlations between predictor and outcome variables are depicted in Table 2.
**Table 1: Descriptive Statistics for Time 1 and Time 2 Predictor Variables.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>Biological Children</th>
<th>Step Children</th>
<th>t</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent-Child Tension</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1.96 (0.65)</td>
<td>2.49 (0.78)</td>
<td>-5.92***</td>
<td>-0.57</td>
<td></td>
</tr>
<tr>
<td>Wives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husbands</td>
<td>4.08 (0.47)</td>
<td>4.05 (0.52)</td>
<td>0.75</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>T1 Marital Quality</td>
<td>4.04 (0.64)</td>
<td>3.98 (0.70)</td>
<td>1.18</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>T2 Marital Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1 Depression</td>
<td>12.0 (9.2)</td>
<td>10.4 (10)</td>
<td>1.01</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>T2 Depression</td>
<td>13.8 (11.6)</td>
<td>9.8 (8.2)</td>
<td>2.89**</td>
<td>0.31</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N ranged from 103 to 112 due to missing data. †p < .10, *p < .05, **p < .01, ***p < .001.*
Table 2: Bivariate Correlations Between All Study Variables.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>3</th>
<th>4</th>
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<td>-.35**</td>
<td>-.32**</td>
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<td>-.34**</td>
<td>-.31**</td>
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<td>10. T2 Dep W</td>
<td>.23**</td>
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<td>-.36**</td>
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<td>.34**</td>
<td>.02</td>
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<td>11. T2 Dep H</td>
<td>.17*</td>
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<td>.34**</td>
<td>-.26**</td>
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<td>12. Tense Bio</td>
<td>.16*</td>
<td>-.31**</td>
<td>-.32**</td>
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<td>-.16</td>
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<td>.18*</td>
<td>.17*</td>
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<td>13. Tense Step</td>
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<td>-.12</td>
<td>-.18*</td>
<td>-.16*</td>
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<td>-.01</td>
<td>.01</td>
<td>.21*</td>
<td>.17*</td>
<td>.15</td>
</tr>
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</table>

Note. N ranged from 103-112 due to missing data on some variables. T1 = Time 1, T2 = Time 2, MarQual = Marital Quality, W = Wife, H = Husband, C = Average score for the Couple, Dep = Depressive Symptoms, Tense = Parent-Child Tension, Bio = Biological Children, Step = Step Children. ¹ p < .10, *p < .05, **p < .01, ***p < .001
**Control Variables**

Prior to testing the primary research questions, demographic variables were tested to see if they were associated with the primary outcome variable, divorce. Bivariate correlational analyses (2-tailed) revealed that none of the following variables were related to divorce: marriage duration \((r = -.10, p = .32)\), cohabitation duration \((r = .01, p = .93)\), number of biological children \((r = -.03, p = .77)\), number of stepchildren \((r = .05, p = .63)\), total number of children \((r = -.08, p = .42)\), child age\(^7\) \((r = .03, p = .75)\), age of wives \((r = .06, p = .53)\) or husbands \((r = -.01, p = .95)\), years of education for wives \((r = .02, p = .82)\) or husbands \((r = -.14, p = .15)\), or family income \((r = -.13, p = .19)\). Chi-square analyses were used to test the relationship between categorical demographic variables and divorce. Again, none of the following variables were significantly associated with divorce: stepfamily type (e.g., stepmother family, stepfather family, or complex/stepmother-stepfather family), \(X^2(2, N = 112) = 2.79, p = .25\); whether the couple had a mutual child, \(X^2(1, N = 112) = 1.0, p = .32\); or whether the couple was legally married or living common-law at Time 1 \(X^2(1, N = 112) = 1.53, p = .22\). Given than none of these demographic variables were significantly associated with divorce, none were included as control variables in subsequent analyses. However, Time 1 marital quality was included as a control in all analyses to evaluate whether the variables of interest in each analysis were able to predict divorce above and beyond the predictive power of marital quality.

\(^7\) Sample size for correlation = 603 = the number of children in the sample. However, the test was evaluated conservatively with 110 degrees of freedom based on the study sample size of 112 couple, where \(df = N-2\).
Research Question 1

It was predicted that parent-child relationship quality would be significantly poorer for step relationships relative to biological relationships. Consistent with past research (DeLongis & Preece, 2002; Ihinger-Tallman & Pasley, 1997), support for this hypothesis was found. Paired-samples $t$-tests revealed that stepparent-child relationships were characterized by significantly more tension. The effect size for this difference fell within the medium range (see Table 1).

Research Question 2

It was predicted that both the quality of the marital relationship as well as parent-child relationships at Time 1 would predict divorce at Time 3. Specifically, it was expected that poorer marital quality and higher stepparent-child tension would be associated with a higher likelihood of divorce at Time 3. In contrast, biological parent-child tension was not expected to exert a main effect on the outcome variable. However, significant interactions between stepparent-child tension x biological parent-child tension and stepparent-child tension x marital relationship quality were also expected.

These hypotheses were tested with a series of hierarchical logistic regression analyses given that the outcome variable is dichotomous (e.g., married vs. divorced). Whereas linear regression has assumptions of normality and homoscedasticity, logistic regression has only one assumption, that the outcome variable has a binomial distribution (Peng, Lee, & Ingersoll, 2002). Data were examined for potential outliers; none were detected. Logistic regression uses maximum likelihood
criteria to determine the log odds of the outcome event based on a set of independent variables. Although log odds are not intuitively interpreted, log odds are easily transformed to odds ratios which serve as a measure of effect size. Odds ratios ($e^\beta$) are reported for each effect. Unlike multiple regression, standardized coefficients are not routinely reported in logistic regression analyses because there is no meaningful way to standardize the dichotomous outcome variable (see Pampel, 2000 for a review of this issue). Instead, data were semi-standardized; in other words, all independent variables were standardized but not the dependent variable. Semi-standardization transforms all independent variables to the same metric which allows direct comparison among logit coefficients (equivalent to $B$'s in multiple regression).

The logistic regression analyses followed two general models. In the first model, the average level of Time 1 marital quality in the couple was entered in Step 1 to test the main effect of marital quality on divorce. Time 1 biological and stepparent-child tension were added in Step 2 to test the main effects of biological and stepparent-child relationship quality on divorce, while controlling for marital quality. The interaction between biological and stepparent-child tension was added in Step 3 to determine whether the quality of relationships with stepchildren versus biological children interact to predict divorce (see Equation 1). The second model tested the prediction that stepparent-child tension would moderate the relationship between marital quality and divorce. Step 1 included the main effects of Time 1 stepparent-child relationship quality and marital quality, and the interaction between these two variables was added in Step 2 (see Equation 2). Main effects were tested with 1-tailed tests because the direction of
these effects was predicted; however, the direction of the interaction effects were not specified and therefore interactions were tested with 2-tailed tests.

Equation 1.

Step 1:
\[ Z(\text{Divorce}) = b_0 + b_1(\text{Marital Quality}) \]

Step 2:
\[ Z(\text{Divorce}) = b_0 + b_1(\text{Bio Tension}) + b_2(\text{Step Tension}) + b_3(\text{Marital Quality}) \]

Step 3:
\[ Z(\text{Divorce}) = b_0 + b_1(\text{Bio Tension}) + b_2(\text{Step Tension}) + b_3(\text{Bio X Step Tension}) + b_4(\text{Marital Quality}) \]

Equation 2.

Step 1:
\[ Z(\text{Divorce}) = b_0 + b_1(\text{Marital Quality}) + b_2(\text{Step Tension}) \]

Step 2:
\[ Z(\text{Divorce}) = b_0 + b_1(\text{Marital Quality}) + b_2(\text{Step Tension}) + b_3(\text{Marital Quality X Step Tension}) \]

As shown in Table 3, these hypotheses were partially supported. The couples' average rating of marital quality at Time 1 was significantly associated with divorce at Time 3. The odds ratio associated with this effect indicates that a 1 SD increase in Time 1 marital quality scores was associated with a 33% reduction in the probability of divorce at Time 3. As expected, biological parent-child tension did not predict divorce but unexpectedly, neither did stepparent-child tension.\(^8\)

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\(^8\) Biological and stepparent-child tension were also tested separately, each entered into a logistic regression model as the sole predictor of divorce to ensure there were no main effects that were being obscured by entering biological and stepparent-child variables into the same model, or by controlling for marital quality. The results remained unchanged; there was no main effect of biological or stepparent-child tension on divorce.
However, a significant interaction was found between stepparent-child tension and biological parent-child tension. A marginally significant interaction was also found between stepparent-child tension and marital quality ($p = .06$).\textsuperscript{9} Taken together, these results indicate that while marital quality is an important predictor of divorce in remarried couples, (step)parent-child relationships also provide an important context in which to understand the effect of marital quality on divorce.

\textsuperscript{9}Although it was not anticipated that biological parent-child tension would predict divorce, the interaction between biological parent-child tension and marital quality was also tested and it was not significant.
Table 3: Hierarchical Logistic Regression Results for the Prediction of Divorce from the Stepfamily Context.

<table>
<thead>
<tr>
<th>Time 1 Predictor</th>
<th>$\chi^2$</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$e^B$</th>
</tr>
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<tr>
<td><strong>Model 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td>3.78*</td>
<td>-0.40*</td>
<td>0.21</td>
<td>0.67</td>
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<td>Marital Quality</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
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<td>-0.34*</td>
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<td>0.71</td>
</tr>
<tr>
<td>Marital Quality</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bio Tension</td>
<td>0.15</td>
<td>0.22</td>
<td>1.16</td>
<td></td>
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<tr>
<td>Step Tension</td>
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<td>0.21</td>
<td>1.04</td>
<td></td>
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<tr>
<td>Step 3:</td>
<td>5.70*</td>
<td>-0.36*</td>
<td>0.23</td>
<td>0.70</td>
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<tr>
<td>Marital Quality</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bio Tension</td>
<td>0.13</td>
<td>0.23</td>
<td>1.14</td>
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</tr>
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<td>Step Tension</td>
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<td>0.21</td>
<td>0.70</td>
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<td>Marital Quality</td>
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<tr>
<td>Step Tension</td>
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<td>1.06</td>
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<tr>
<td>Step 2:</td>
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<td>0.22</td>
<td>0.69</td>
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<td>Marital Quality</td>
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<td>Step Tension</td>
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<td>0.99</td>
<td></td>
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<td>Step Tension X Marital Quality$^{10}$</td>
<td>0.45*</td>
<td>0.24</td>
<td>1.56</td>
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</table>

Note: $N = 112$. $e^B = $ Odds ratio = the odds of divorce given a 1-SD change on the predictor item. $^a$ Tests of interactions were 2-tailed whereas tests of main effects were 1-tailed. $^1 p < .10$, $^* p < .05$, $^{**} p < .01$, $^{***} p < .001$

$^{10}$ As seen in the table, the interaction between stepparent-child tension and the average level of marital quality in the couple was marginally significant ($p = .06$, 2-tailed). The interaction between stepparent-child tension and Wives’ marital quality failed to reach significance ($p = .18$); however, husbands’ marital quality significantly interacted with stepparent-child tension to predict divorce ($p = .026$).
The significant stepparent-child tension X biological parent-child tension interaction as well as the marginally significant stepparent-child tension X marital quality interaction was further examined with two-tailed analyses of the simple slopes.\(^{11}\) The effect of stepparent-child tension on divorce was first tested at “low” and “high” levels of biological parent-child tension (e.g., 1 SD below and above the biological tension mean, respectively). Both simple slopes approached significance, but neither demonstrated a significant main effect on divorce; the slope of stepparent-child tension at low levels of biological parent-child tension was \(B = 0.44, p = .13, \text{OR} = 1.56\), and at high levels of biological parent-child tension \(B = -0.53, p = .12, \text{OR} = 0.59\). The effect of stepparent-child tension on divorce was re-examined at 2 SDs below and above the mean of biological parent-child tension. At these very low and very high values of biological parent-child tension, the simple effects of stepparent-child tension were both significant and are demonstrated in Figure 1. For low biological parent-child tension (e.g., 2 SD below the mean), \(B = 0.91, p = .04, \text{OR} = 2.49\), and at high levels of biological parent-child tension (e.g., 2 SD above the mean), \(B = -1.04, p = .04, \text{OR} = 0.36\).

The effect of marital quality at low and high levels of stepparent-child tension revealed a significant effect of marital quality at low levels (e.g., -1 SD) of stepparent-child tension \((B = -0.81, p = .02, \text{OR} = 0.44)\), but not at high levels (e.g., +1SD) of stepparent-child tension \((B = 0.08, p = .80, \text{OR} = 1.08);\) see Figure 2). Based on the results depicted in Figure 2 it can be concluded that the quality of stepparent-child

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\(^{11}\) The marital quality X stepparent-child tension interaction approached significance \((p = .06, 2\text{-tailed})\). Given the relatively small sample size in this study and low power as a result, this interactions was further explored with simple slope and mediational analyses despite failure to reach the traditional significance level of \(p < .05\). Future research should investigate this relationship in more powerful research designs.
relationships moderates the effect of marital quality on divorce such that when good stepparent-child relationships exist (e.g., low tension), marital quality demonstrates the expected inverse relationship with divorce. However, when stepparent-child relationships are poor, the relationship between marital quality and divorce is non-significant.
Figure 1: Interaction Effect of Biological and Stepparent-Child Tension on Divorce.

Figure 2: Interaction Effect of Stepparent-Child Tension and Marital Quality on Divorce.
Note. Low and High levels represent 1 SD below and above the mean, respectively.

Research Question 3

It was predicted that poor family relationships at Time 1 would be related to divorce through poor adaptational mechanisms. That is, couples who demonstrate difficulty adapting to parent-child tension and low marital quality at Time 1 were expected to experience further decreases in marital quality and increases in depressive symptoms at Time 2. These Time 2 outcomes were expected to be pathways through which Time 1 family relationship difficulties predict divorce. To test these predictions, husbands’ and wives’ depressive symptoms and marital quality at Time 2 were tested as mediators of the main effects and interaction effects that predicted divorce in the preceding analyses—Time 1 marital quality, biological X stepparent-child tension, and marital quality X stepparent-child tension. Analyses involving mediation of the main effect of marital quality on divorce were conducted with one-tailed tests because the direction of each path in the meditational model was predicted: decreased marital quality at Time 1 was expected to lead to increased depressive symptoms/decreased marital quality at Time 2, and subsequently, increased likelihood of divorce at Time 3. Two-tailed tests were conducted for the meditational models involving interactions due to the fact that the specific nature of the interaction effect on the dependent variable was not specified at the outset of the study. Time 1 levels of wives’ or husbands’ depressive symptoms were controlled in models testing Time 2 wives’ or husbands’ depressive symptoms as mediators, and Time 1 marital quality was controlled in all meditational analyses.

All meditational analyses were conducted with the bootstrapping approach recommended by Preacher & Hayes (2008). Traditionally, meditational models have
been tested with Baron and Kenny’s *Causal Steps Strategy* (1986) and/or the Sobel test of the indirect effect (Sobel, 1987). However, the causal steps approach has been criticized both for its low power as well as the fact that it does not directly quantify the effect it purports to assess—the indirect path from the independent variable to the dependent variable, through the proposed mediator (Hayes, 2009). Instead, this approach infers the significance of the indirect effect from a series of hypothesis tests. The Sobel test improves upon the causal steps approach by directly quantifying the indirect effect; however, it too has been criticized on the basis that this test assumes normality of the sampling distribution of the indirect effect and normality of this distribution is rarely achieved (Hayes, 2009). More recently, bootstrapping approaches have been acknowledged as the preferred method of estimating the indirect effect because bootstrapping is more powerful and accurate than both the causal steps strategy and the Sobel test (e.g., Hayes, 2009; Shrout & Bolger, 2002). Unlike the causal steps approach, bootstrapping directly quantifies the indirect effect and unlike the Sobel test, bootstrapping does not assume a particular sampling distribution of the indirect effect and therefore is not adversely affected by departures from normality. As a result, there is no distribution-based test statistic to report (e.g., $t$, $z$) for the indirect effect (Shrout & Bolger, 2002). Instead, significance of the indirect effect is determined when the 95% confidence interval of the indirect effect does not include zero. All meditational analyses were conducted with SPSS code developed by Preacher and Hayes (2008) that estimates the indirect effect based on 5000 bootstrap iterations. This code accommodates the combination of dichotomous and continuous variables in these
models by using logistic regression to test pathways with dichotomous outcomes and ordinary least squares regression to test pathways with continuous outcomes.

Results for the models that tested husbands’ and wives’ Time 2 depressive symptoms as potential mediators are presented in Table 4. As shown, the only significant indirect effect was for the effect of Time 1 marital quality on divorce, mediated through wives’ Time 2 depressive symptoms (see Figure 3). By contrast, husbands’ Time 2 depressive symptoms failed to mediate the effect of Time 1 marital quality on divorce; although the level of husbands’ Time 2 depressive symptoms was a marginally significant predictor of divorce, Time 1 marital quality did not predict husbands’ depressive symptoms at Time 2, rendering this meditational mechanism non-significant (see Figure 4). Furthermore, neither wives’ nor husbands’ Time 2 depressive symptoms mediated any of the interactions.
### Table 4: Analyses of Wives’ and Husbands’ Time 2 Depressive Symptoms as Mediators of Time 1 Predictors of Divorce.

<table>
<thead>
<tr>
<th>Time 1 Predictor Variables</th>
<th>Wives’ Time 2 Depression (N = 106)</th>
<th>Husbands’ Time 2 Depression (N = 103)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Effect B (SE)</td>
<td>Direct Effect B (SE)</td>
</tr>
<tr>
<td>Marital Quality&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-0.35* (0.20)</td>
<td>-0.18 (0.23)</td>
</tr>
<tr>
<td>Bio x Step Tension</td>
<td>-0.49* (0.22)</td>
<td>-0.55* (0.22)</td>
</tr>
<tr>
<td>Marital Quality x Step Tension</td>
<td>0.44&lt;sup&gt;t&lt;/sup&gt; (0.24)</td>
<td>0.53* (0.25)</td>
</tr>
</tbody>
</table>

*Note.* The total effect represents the effect of the independent variable on the dependent variable without partialling out the effect of the mediator. The direct effect is the effect of the independent variable with the effect of the mediator removed. The indirect effect is the effect of the independent variable on the dependent variable, through the mediator. Whereas the direct and indirect effect sum to the total effect in models where all variables are continuous, they do not typically sum precisely to the total effect when the outcome is dichotomous, as is the case here (Preacher & Hayes, 2008).<sup>a</sup>1-tailed tests used to test mediation of the Time 1 marital quality main effect; 2-tailed tests used to test the remainder of meditational models.

<sup>t</sup> p < .10, <sup>*</sup>p < .05, <sup>**</sup>p < .01, <sup>***</sup>p < .001
Figure 3: Wives’ Time 2 Depressive Symptoms Mediate the Effect of Time 1 Marital Quality on Divorce.

Note. Wives’ Time 1 Depression controlled. $^1 p < .10$, $^* p < .05$, $^{**} p < .01$, $^{***} p < .001$, 1-tailed.

Figure 4: Husbands’ Time 2 Depressive Symptoms Does Not Mediate the Effect of Time 1 Marital Quality on Divorce.

Note. Husbands’ Time 1 Depression controlled. $^1 p < .10$, $^* p < .05$, $^{**} p < .01$, $^{***} p < .001$, 1-tailed.
Although husbands’ depressive symptom levels at Time 2 failed to mediate the effect of marital quality on divorce, exploratory analysis revealed a marginal moderation effect of husband’s Time 2 depressive symptoms by Time 1 marital quality (while controlling for husbands’ Time 1 depressive symptoms; $B = 0.53$, $p = .07$, OR = 1.71, 2-tailed). This marginal interaction effect is graphed in Figure 5. Simple slopes analyses were conducted to test the effect of Time 2 husbands’ depressive symptoms at low and high levels of Time 1 marital quality (e.g., 1 SD below and above the mean, respectively). This revealed that husbands’ Time 2 depressive symptoms were only a significant predictor of divorce in couples who reported good marital quality at Time 1 ($B = 1.03$, $p = .04$, OR = 2.81); in contrast, husbands’ Time 2 depressive symptoms were not significantly associated with divorce for couples who reported poor marital quality at Time 1 ($B = -0.04$, $p = .94$, OR = 0.97).

**Figure 5: Time 1 Marital Quality Moderates the Effect of Husbands’ Time 2 Depressive Symptoms on Divorce.**

Note. Low and high represent 1 SD below and above the mean, respectively.

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12 Marital Quality at Time 1 did not interact with Wives’ Time 2 depression levels, $B = 0.29$, $p = .34$, OR = 1.34, 2-tailed.
Results for the models that tested Time 2 marital quality as a potential mediator are presented in Table 5. Not surprisingly, Time 2 marital quality was a robust mediator of the relationship between Time 1 marital quality and divorce. However, Time 2 marital quality did not significantly mediate the relationships between any of the interaction effects and divorce. That is, change in marital quality over a two-year interval was not a significant mechanism through which interactions between the quality of stepparent-child relationships with biological parent-child relationships or marital quality predicts divorce.

Table 5: Analyses of Time 2 Marital Quality as a Mediator of Time 1 Predictors of Divorce.

<table>
<thead>
<tr>
<th>Time 1 Predictor Variables</th>
<th>Mediator Time 2 Marital Quality (N = 104)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Effect</td>
</tr>
<tr>
<td>Marital Quality&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-0.30&lt;sup&gt;t&lt;/sup&gt; (0.21)</td>
</tr>
<tr>
<td>Bio X Step Tension</td>
<td>-0.50&lt;sup&gt;*&lt;/sup&gt; (0.22)</td>
</tr>
<tr>
<td>Marital Quality x Step Tension</td>
<td>0.40&lt;sup&gt;†&lt;/sup&gt; (0.24)</td>
</tr>
</tbody>
</table>

Note. The total effect represents the effect of the independent variable on the dependent variable without partialling out the effect of the mediator. The direct effect is the effect of the independent variable with the effect of the mediator removed. The indirect effect is the effect of the independent variable on the dependent variable, through the mediator. Whereas the direct and indirect effect sum to the total effect in models where all variables are continuous, they do not typically sum precisely to the total effect when the outcome is dichotomous, as is the case here (Preacher & Hayes, 2008).<sup>a</sup>1-tailed tests used to test mediation models of the marital quality main effect; 2-tailed tests used to test the remaining meditational models.

<sup>†</sup><i>p <.10</i>, <sup>*</sup><i>p <.05</i>, <sup>**p <.01</sup>, <sup>***p <.001</sup>
Discussion

The purpose of this study was to investigate predictors of marital stability in remarriages. More specifically, the key goal was to investigate the influence of the stepfamily system on the stability of the marital relationship. Decades of marital research have led to a comprehensive understanding of broad interpersonal processes (e.g., Levinger, 1965; Lewis & Spanier, 1979; Thibaut & Kelley, 1959) as well as specific behavioural exchanges (e.g., Carrere & Gottman, 1999; Gottman et al., 1998; Gottman & Levenson, 2000) within couples that are associated with marital stability. However, the current study was guided by the contextual frameworks embraced by the vulnerability-stress-adaptation model (VSA; Karney & Bradbury, 1995) and stress-divorce model (Bodenmann, 1995). Both the VSA and stress-divorce models emphasize factors external to the marital relationship that bear influence on the marital relationship. As a result, these two models are easily integrated with the theory that is most often used to investigate stepfamily functioning, family systems theory. Together, these theories suggest that the broader stepfamily system should influence the quality and stability of the remarriage.

Owing to the longitudinal methodology, the current study adds considerably to the literature by following couples long enough to measure divorce as a marital outcome. By contrast, a clear majority of marital studies instead focus on marital quality as the key outcome. While there is a large literature demonstrating a relationship between marital quality and stability (Karney & Bradbury, 1995; Rodrigues et al., 2006), predictors of these outcomes cannot be assumed to be interchangeable (Terling-Watt,
2001). For example, behavioural researchers provided early evidence that rewards derived from a relationship bear more influence on marital quality whereas barriers to leaving the relationship or the availability of relationship alternatives bear more influence on marital stability (Lewis & Spanier, 1979; Previti & Amato, 2003). The current study directly investigates both marital quality and marital stability in the context of the family system.

Family systems theory proposes that family dyads affect, and are affected, by other family dyads (Cox & Paley, 1997, 2003). It has been theorized that relationships between family dyads may be even more influential in stepfamilies given the complexity of the stepfamily system (Fine & Kurdek, 1995; Guisinger et al., 1989). In particular, the stepparent-child dyad has received a lot of attention because past research that has demonstrated consistently poorer relationships between stepparents and stepchildren relative to biological parents and children (e.g., poorer communication, less warmth or fewer expressed positive emotions, fewer shared activities, and more tension; Coleman et al., 2000; DeLongis & Preece, 2002; Ihinger-Tallman & Pasley, 1997). The current study also revealed that relationship quality between stepparents and stepchildren was rated more poorly than relationships between biological parents and children. Stepparents reported more tension with their stepchildren relative to analogous biological relationships. However, the current research also raises caution about placing the focus exclusively on the relationship between stepparents and stepchildren. As discussed below, the effect of stepparent-child relationships on marriage outcomes is best understood when considered in the context of the whole family system (Preece & DeLongis, 2005).
Predictors of Divorce: Couple Factors

Turning to the key outcome of interest, divorce, marital quality was found to be a significant predictor of divorce in the current study of stepfamilies. This replicates findings across broad marriage samples (e.g., first-marriages, newlyweds). Not only did initial levels of marital quality predict divorce, marital quality measured two years later was a full mediator of the relationship between earlier levels of marital quality and divorce. This demonstrates that change in marital quality over time is a strong indicator of subsequent divorce outcomes.

Despite this well-founded relationship between marital quality and stability, marital quality and stability are not interchangeable constructs (Terling-Watt, 2001). Past research has revealed characteristics within the couple that attenuate this relationship such as duration of the marriage, attitudes and beliefs about marriage, insecurity, and race (Rodrigues et al., 2006). The current study also sought to investigate possible attenuating factors with a specific focus on the moderating effects of the broader family system. There is good reason to expect that in stepfamilies the association between marital quality and stability may be less robust given that studies have found only small differences, or no differences in the quality of remarriages relative to first marriages; yet, the stability of remarriages is consistently poorer (Coleman et al., 2000; Vemer, Coleman, Ganong, & Cooper, 1989; Whitton et al., 2013). This suggests that factors other than declining marital quality may contribute to the increased divorce rate in stepfamilies and attenuate the robust association that is typically found between marital quality and stability.
Predictors of Divorce: Family Factors

In keeping with these expectations, the current study revealed that the effect of marital quality on divorce was qualified by relationships in the broader stepfamily system. Although biological parent-child relationships did not moderate the effect of marital quality on the probability of divorce, tension between stepparents and stepchildren was a marginally significant moderator of the effect of marital quality. Further investigation of this interaction found that marital quality significantly predicted divorce only when stepparents reported good relationships with their stepchildren (e.g., low stepparent-child tension). Marital quality did not predict divorce in families where stepparent-child relationships were poor (e.g., high stepparent-child tension). The difference in odds ratios associated with these effects was quite striking; when stepparent-child relationships were good, couples were approximately 55% less likely to divorce for each 1 SD increase in marital quality. In contrast, when stepparent-child relationships were poor, the probability of divorce was virtually unchanged by the level of marital quality as indicated by the odds ratio which was approximately 1. Therefore, the protective effects of marital quality on marital stability appear to be lost in the context of tense stepfamily dynamics.

Taken together, these findings demonstrate that it is important to look beyond the marital relationship to determine contextual factors that influence divorce outcomes in stepfamilies. Our results show that when there was a high level of tension between stepparents and stepchildren, one of the factors that is most often cited as a predictor of divorce, marital quality, was no longer a good indicator of divorce probability. This calls
for research to look further at families with high levels of stepparent-child tension to
determine why marital quality is not a good indicator of the stability of marriages in
those families. For example, it would be useful to examine attributions about perceived
distress in remarried couples who report high or low levels of stepparent-child tension.
In the context of high stepparent-child tension, these difficult stepparent-child
relationships present a salient non-marital stressor. Remarried couples may
inaccurately attribute distress arising from their marriage to other salient sources of
stress, such as their tense stepparent-child relationships. Therefore, in the context of
this salient non-marital stressor (e.g., stepparent-child tension) ratings of marital quality
may be less reliable predictors of divorce. In contrast, it may be that in the context of
low stepparent-child tension levels, couples are less likely to misattribute marital
dissatisfaction to non-marital relationships because sources of non-marital stress are
less salient. That is, in families with low tension in step relationships, marital distress
may be more accurately attributed to marital problems, thus making marital satisfaction
scores a stronger indicator of subsequent marital stability outcomes. Past research
supports these ideas with findings that in the context of salient non-marital stressors
(e.g., work stressors, non-marital relationship stressors), couples are more likely to
attribute marital distress to non-marital factors (Poyner-Del Vento & Cobb, 2011; Tesser
& Beach, 1998).

Inaccurate attributions about marital quality may be one factor that diminishes the
predictive power of marital quality in the context of salient stepfamily stress. It may also
be that the benefits derived from the marriage relationship, even when accurately
perceived, are not sufficient to outweigh the costs of stepfamily life in families where
there is high tension between stepparents and stepchildren. Future research could also examine how costs and benefits of stepfamily living are weighted in the stability of remarriages.

In addition to examining factors that may help to explain why marital quality fails to protect against divorce in the context of high stepparent-child tension, broader implications arise from this interaction. In general, future research would be apt to scrutinize predictors of divorce that have emerged primarily from studies of first-married or newly-wed couples to determine the extent to which they extend to remarriages and in particular, remarriages that exist in the context of strong or weak stepfamily relationships.

Having established that marital quality significantly predicts divorce but is moderated by the effect of stepparent-child relationships, the next goal was to determine whether stepparent-child relationships exerted a main effect on divorce. Unlike previous studies that have found a relationship between stepparent-child relationship quality and marital quality (Fine & Kurdek, 1995; Guisinger et al., 1989; Ihinger-Tallman & Pasley, 1997), stepparent-child tension levels did not exert a main effect on divorce in the current study, nor did biological parent-child tension levels. However, when the quality of step and biological parent-child relationships were considered in relation to one another, it became apparent that main effects were obscured by a significant crossover interaction between the quality of step and biological parent-child relationships.

This crossover interaction was interpreted by looking at the effect of stepparent-child tension at low and high levels of biological parent-child tension. This revealed that
when the level of biological parent-child tension within families was very low (e.g., 2SD below the mean level of biological parent-child tension), there was an increased probability of divorce as stepparent-child tension increased. Therefore, in families with very good biological parent-child relationships, the prediction of divorce from tense stepparent-child relationships aligns with past research demonstrating that poorer stepparent-child relationships are associated with poorer marital quality and stepfamily adjustment (Fine & Kurdek, 1995; Guisinger et al., 1989; Ihinger-Tallman & Pasley, 1997). Interestingly though, the exact opposite relationship existed between stepparent-child tension levels and divorce when considered in the context of high levels of biological parent-child tension. In the context of high tension levels between biological parents and children, divorce rates decreased as stepparent-child tension increased. Although this latter finding may be counterintuitive at first glance, by taking a systemic approach to interpretation, there are many possible explanations that should be considered. Of note, the simple effects of stepparent-child tension at low and high levels of biological parent-child tension did not reach statistical significance when “low” and “high” levels were defined as 1 SD below and above the mean, respectively. However, these simple effects were statistically significant when tested at 2 SDs below and above the mean. That is, the effects of stepparent-child tension on divorce outcomes become more apparent when examined in the context of more extreme values of biological parent-child tension.

When considering what might explain the unexpected simple effect of a decreasing probability of divorce in the context of increasing stepparent-child tension, it is important to draw attention to the fact that this simple effect occurred in the context of
high tension levels between biological parents and children. Biological parent-child relationships are often the strongest relationships in stepfamilies due to their longstanding, biological ties (Visher & Visher, 1998). Following from this, poorer relationship quality in these longstanding, biological relationships may be indicative of broader difficulties within the stepfamily system. For example, it would be useful to consider whether there may be pre-existing vulnerabilities in parents and/or children such as high levels of problematic personality traits, disruptive child behaviour, or poor parenting behaviour that could be contributing to problems within the biological parent-child dyad. Such vulnerabilities could strain parent-child relationships in addition to the marital relationship, and elevate the risk of divorce. The stepfamily literature has generally found that stepfamilies demonstrate more of these vulnerabilities relative to nuclear families (Booth & Edwards, 1992; Coleman et al., 2000; Johnson & Booth, 1998). As such, it will be important to investigate third variables such as personality traits, child behaviour, and parenting skills that may be confounded with high levels of tension between biological parents and children and influencing the rate of divorce.

Another interesting pattern revealed in this interaction is that when parent-child tension levels are consistent across both step relationships and biological relationships, regardless of whether the level of tension is high or low, the probability of divorce is lower. In contrast, when tension levels in one type of parent-child dyad (whether biological or step) are not mirrored by the other type of parent child relationship, the probability of divorce increases. While it is not surprising that marriages are more likely to remain intact in families where tension is low across all parent-child types, the low probability of divorce in families where tension is high across all parent-child types is
less intuitive. This finding could be an indication of families in which the remarriage relationship is receiving time and attention at the cost of maintaining strong relationships with children. Alternatively, these couples may be characterized by moderating factors that prevent the spillover of tensions from parent-child relationships to the marital dyad and help the couple to avoid marital dissolution. As discussed earlier, research has found that in the context of salient non-marital stress, couples are able to more accurately attribute distress arising from external sources to those external sources rather than misidentifying their marriage as the source of distress (Poyner-Del Vento & Cobb, 2011; Tesser & Beach, 1998). Therefore, attributions may be an important moderating factor that helps to explain lower divorce rates in the context of high tension with all types of children within stepfamilies. Further, it may be that the marital stability in these couples, despite high tension within all parent-child relationship types, arises from strong inter-parental communication and supportive marital interactions that assist couples to cope collaboratively with their shared parent-child challenges. It could be that high tension in these parent-child relationships brings about active engagement in family conflicts that result in effective resolutions. Given that conflicts are known to arise at higher rates within stepfamilies relative to nuclear families, effective ways of managing conflict may be particularly important (Hobart, 1991). Indeed, a joint problem solving approach to parenting problems has been found to increase the perception of coping assistance within couples and reduce stress (Gotlib & Beach, 1995).

Research examining interpersonal conflict across various types of relationships has demonstrated that conflict is not only associated with detrimental effects, but can also bring about positive outcomes in relationships (Laursen & Hafen, 2010). For
example, in the marital literature “reversal effects” refer to the surprising relationship between negative marital conflict behaviour and improved marital quality over time (Fincham & Beach, 1999). This effect is not unlike the seemingly counterintuitive finding in the current study in which high tension in all parent-child relationship types was actually associated with a decreased probability of divorce. Explanations of reversal effects have revealed benefits of engagement in conflict vs. withdrawal from conflict (Fincham & Beach, 1999). Roberts (2000) has argued based on her own research and that of others that research on conflict engagement and withdrawal behaviours needs further refinement in order to understand the contexts in which both conflict and withdrawal may be beneficial under some circumstances and detrimental under other circumstances. For example, she found that withdrawal had varying effects on husbands' and wives' marital satisfaction depending on whether it occurred in the context of hostile vs. non-hostile conflict. Her work highlights the importance of investigating the contextual factors that may moderate the effects of conflict engagement vs. conflict avoidance on marital outcomes. Drawing from the literature on reversal effects within marital interactions may help to guide future examinations of the circumstances in which discrete conflict events and global tension levels may result in positive or negative relationship consequences within stepfamilies.

In contrast to the lower probability of divorce when there was concordance among biological and stepparent-child tension levels, the imbalances brought to a stepfamily system when parent-child tension is high only in step relations or only in biological relations may give rise to additional stressors that strain the marital relationship. For example, these tension imbalances may cause disagreements within
the marriage over the behaviour of biological vs. stepchildren, or parenting practices of biological vs. stepparents. In other words, tensions from parent-child relationships in this case may spillover, pitting one parent against the other, and erode the marital relationship rather than strengthening the marriage through collaborative coping with a shared stressor. Therefore, it will be important to investigate individual difference characteristics and additional contextual factors that may moderate these effects of stepfamily tension dynamics on remarriage outcomes. However, it will also be important to examine the content of conflicts that arise within family subsystems and the possible continuance of these conflict issues among other stepfamily subsystems. One way to achieve this goal would be to examine daily processes surrounding discrete tension interactions within stepfamily dyads (Margolin et al., 1996). Whereas the current study focused on global assessments of tension within (step)parent-child relationships as a key starting point, future research can build on this important finding by investigating the mechanisms through which conflictual interpersonal dynamics are transmitted within families and contribute to the potential erosion of the remarriage.

Although further research is needed to better understand the implications of the interaction between step and biological parent-child tension and divorce, based on the statistical significance of this interaction it can be concluded that it is critical to examine the effect of stepfamily relationships on divorce in the context of the larger stepfamily system. A similar conclusion was drawn by Jenkins and her colleagues (2005) based on their finding that children’s externalizing behaviour in both nuclear families and stepfamilies prospectively predicted increased marital conflict over time, but this effect was moderated by the overall dynamic in the family system. That is, externalizing
behaviour only predicted marital conflict in families in which the average level of externalizing behaviour across children was of moderate or high levels; externalizing behaviour was not a significant predictor of marital conflict in families where, on average, children had lower levels of externalizing behaviour. Like our finding, Jenkins’ work demonstrates that it is important to consider all children within a family when investigating the role of child-related constructs on marital outcomes.

**Mechanisms of Divorce**

In the current study, two mediators were investigated as potential mechanisms through which the quality of stepfamily relationships affects marital outcomes. It was predicted that both Time 2 marital quality and depressive symptoms would mediate the Time 1 main effect of marital quality on divorce, the interaction effect of stepparent-child X biological parent-child tension, and marginal interaction effect of stepparent-child tension X marital quality. These mediators were selected based on a large literature that links marital quality and depression to divorce (e.g., Rehman et al., 2008; Whisman, 1999, 2001; Whisman & Bruce, 1999). Further, a relationship has also been found between parent-child relationship quality and both marital satisfaction (Fine & Kurdek, 1995; Fine et al., 1994; Guisinger et al., 1989) and depression (Fine et al., 1994). Based on their research on these topics, Fine and his colleagues proposed that when parents have low levels of depression and high levels of marital quality, they may be better able to cope with the challenges encountered in stepfamily life. Therefore, this theory suggests that depression and marital quality would be important mechanisms through which stepfamily relationships predict the dissolution of marriage.
Surprisingly, neither depressive symptoms nor marital quality mediated any of the interactions effects involving measures of stepparent-child relationship quality (e.g., stepparent-child X biological parent-child tension or stepparent-child tension X marital relationship quality). The null findings in these meditational models suggest that the interactions involving stepparent-child relationship quality have significant effects on marital dissolution independent of any changes in depressive symptoms or marital quality. Similar null findings were noted in an experimental study in which parental affect failed to mediate an established relationship between child behaviour problems and inter-parental discord (Wymbs, 2011). Although disruptive child behaviour predicted parent affect in Wymbs’ study, parent affect was not a mechanism through which children influenced the marital relationship. However, that study did find that parenting behaviour partially mediated the relationship between child behaviour and inter-parental discord. Therefore investigating specific behaviour patterns between parents and children (e.g., disruptive child behaviour, negative parenting practices) could potentially reveal mechanisms through which the quality of stepfamily relationships contributes to dissolution of the marital relationship.

Although Time 2 marital quality and depressive symptoms were not significant mediators of the interaction effects involving stepparent-child relationship quality, these hypothesized mediators were significant mechanisms through which initial levels of

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13 Note that mediators (e.g., depression levels and marital quality) were assessed at Time 2, which occurred two years after the Time 1 assessment of (step)parent-child relationship quality, initial marital relationship quality, and initial depression levels. It remains possible that depression and/or marital quality could be significant mechanisms through which stepfamily relationships predict divorce but that the two-year time frame between Time 1 and Time 2 was not sufficient to capture these potential relationships. Appropriate time frames which capture the rate at which these variables affect change in one another have not yet been established and should be a focus of empirical investigation (Beach, Katz, Kim, & Brody, 2003).
marital relationship quality unfolded to predict divorce. As discussed above, the association between Time 1 marital quality levels and subsequent divorce was mediated by Time 2 marital quality. This confirms that marital quality is an important predictor of divorce in remarriage, just as it is in first marriages, and that the trajectory of remarriage quality over time improves the prediction of divorce. At the same time, additional findings in the current study point to factors external to the marriage itself (e.g., stepparent-child relationships) that also bear influence on marital dissolution, emphasizing the need to look beyond the marital relationship to include the systemic effects of the stepfamily on the marriage (e.g., Preece & DeLongis, 2005).

With respect to depressive symptoms, this was also a significant mediator of the effect of Time 1 marital quality on divorce, but only for wives. Gender differences in the relationship between marital quality and both clinical and subclinical depression have been found previously; however, there are inconsistencies in this field (Rehman et al., 2008). The significant mediation model involving wives’ but not husbands’ depressive symptoms in the current study may provide further evidence of a gender difference in the association between marital functioning and depressive symptoms, although we cannot rule out the possibility that null findings in the meditational model for husbands’ Time 2 depressive symptoms were a result of insufficient power.

Close examination of Figures 3 and 4 reveal that the point in these meditational models at which results diverge for husbands and wives is in the association between Time 1 marital quality and Time 2 depressive symptoms. Initial levels of marital quality significantly predicted wives’, but not husbands’ depressive symptoms two years later, while controlling for initial levels of depressive symptoms. This finding is consistent with
the theory that interpersonal relationships may be more central to the well-being of women than that of men, a theory that has garnered support across numerous fields within psychology. For example, whereas poorer marital functioning is related to poorer self-reported health for both men and women, evidence suggests that marital conflict may exact a greater physiological toll on women than on men (Kiecolt-Glaser & Newton, 2001). Marital conflict is related to poorer cardiovascular functioning (e.g., increased blood pressure), immune functioning (e.g., decreased lymphocyte proliferative responses), and endocrine functioning (e.g., increased cortisol and norepinephrine release) in women than in men.

Similar to the effects on physical health, the quality of the marital relationship appears to exert more influence on women’s emotional experience (Rehman et al., 2008). This was demonstrated in a study of dual-earning couples who were followed over the course of two years in order to determine the effect of both employment and marriage on emotional well-being (Barnett, Raudenbush, Brennan, Pleck, & Marshall, 1995). A significant, negative relationship was found between the quality of employment roles and emotional distress levels and the magnitude of this effect did not differ by gender. Changes in the quality of marital roles were also negatively associated with distress levels; however, this effect of marital quality on emotional well-being was significantly stronger for women relative to men. Poyner-Del Vento and Cobb (2011) found additional evidence that marital stress was more deleterious to marital outcomes for women. They found that the inverse relationship between concurrent levels of depressive symptoms and marital satisfaction was moderated by non-marital stress for men and by marital stress for women, such that non-marital and marital stress
exacerbated the effect of depressive symptoms on marital satisfaction for men and women, respectively. In keeping with the work of Barnett and her colleagues, and Poyner-Del Vento and Cobb, our results also show that marital functioning and depressive symptoms may be more intimately linked for women rather than men.

A question that has often been posed in the literature examining marital functioning and depression is which comes first, declines in marital quality or increases in depression levels? Recent calls in the literature suggest that determining the temporal order of these constructs may not be fruitful given that depression and marital function appear to exert reciprocal influences on one another (Rehman et al., 2008). However, to the extent that studying temporal sequences helps to determine causal mechanisms through which marital functioning and depression lead to, result from, or exacerbate one another, these investigations may help to identify factors that contribute to the observed gender differences. Findings across diverse areas of psychology point to both intrapersonal and interpersonal factors that may be particularly relevant (e.g., Stephenson, Lehman, & DeLongis, 2013).

With respect to intrapersonal factors, the larger effect of marital functioning on women’s emotional well-being demonstrated in our work and others may arise from gender differences in self-construal. Cross and Madson (1997) argue that as a result of gender socialization women develop self-concepts that are relatively more interdependent whereas self-concept among men tends to be relatively more independent. Therefore declines in marital functioning may be more damaging to women if indeed their self-concept is rooted more strongly in the quality of their interpersonal relationships (Poyner-Del Vento & Cobb, 2011). Gender differences in
self-concept as well as other intrapersonal variables such as attributional style (Karney & Bradbury, 1995) should be further explored to determine how they may contribute to the association between marital quality and depressive symptoms in wives but not husbands.

Interpersonal theories of divorce point to additional factors that may contribute to gender differences in the association between marital quality and depressive symptoms. For example, the marital discord model of depression theorizes that marital discord contributes to depression by reducing available support while increasing hostility and stress within marital relationships (Beach, Sandeen, & O'Leary, 1990). Using this model as a framework suggests that it would be useful to investigate supportive processes or hostile communication patterns that may contribute to gender differences in the evolution of depressive symptoms from marital discord (Davila, Bradbury, Cohan, & Tochluk, 1997). In keeping with this, the support gap theory (Cutrona, 1996) suggests that husbands receive more frequent and more helpful support from their wives than they provide to their wives. This theory could help to explain why then, in the face of marital discord, women but not men are at increased risk of depressive symptoms. The quality and quantity of social support that wives provide for husbands may buffer the ill-effects of marital discord for men, and help to prevent emotional distress, whereas the quality and quantity of support that women receive from their partners may be insufficient to buffer the effects of marital discord. Although the support gap theory is based on considerable evidence, there is debate about the relative gender differences in support provision. This debate is fueled by inconsistencies in the social support literature that arise from the variability in conceptual and methodological approaches to
social support research. That is, studies that measure self-reported levels of social support tend to find results that differ from those of observational studies in which supportive interactions are observed in a laboratory setting (Neff & Karney, 2005; Verhofstadt, Buysse, & Ickes, 2007). Taken together, further investigations of both intrapersonal and interpersonal factors may help to elaborate mechanisms of gender differences in marital functioning and depression.

Whereas the pathway from marital distress to depressive symptoms was only revealed for women in the current study, the relationship between depressive symptoms and subsequent divorce was significant for women and approached significance for men. Moderational analyses revealed that the effect of depressive symptoms on the likelihood of divorce for men was qualified by initial levels of marital quality. That is, husbands’ depressive symptoms were a significant predictor of subsequent divorce only when initial marital quality was good. In contrast, when men were in a poor quality marriage, increased depressive symptoms did not elevate the risk of subsequent divorce.

A key theory that has been used to describe the evolution of marital distress from depression is the stress generation model of depression (Hammen, 1991). This model suggests that depressed individuals are more likely to create stress, in particular interpersonal stress, which contributes to marital discord. Support for the stress generation model of depression has been more consistent in samples of women, relative to men (Davila et al., 1997). In keeping with this, the relationship between depressive symptoms and divorce in our sample was clearly significant for women, but only significant for a subset of men—depressive symptoms predicted divorce only in
men who initially enjoyed strong marital quality. Again, the consistency between our findings and theoretical models of depression and marital functioning reveal excellent directions for future research. That is, factors that have been found to contribute to the stress generation mechanism of depression such as social support processes (Davila et al., 1997; Lam, Lehman, Puterman, & DeLongis, 2009) may reveal a greater understanding of the gender differences revealed in the current study.

It bears noting that the current sample had relatively low levels of depressive symptoms on average. However, this study was designed to assess stepfamily relationships in a community setting where subclinical levels of depression would be typical. Further, based on dimensional conceptions of depression, it has been argued that studying subclinical depressive symptomatology provides a useful test of the relationship between marital outcomes and clinical depression (Rehman et al., 2008). It has been argued that using a sample with low levels of depression actually provides a more conservative test of our hypotheses (e.g., Davila et al., 1997) which suggests that additional relationships between depression and marital outcomes may be revealed in samples with clinical levels of depression. These results should be replicated in samples with higher depression levels to determine whether results are generalizable to clinical samples.

In sum, the results of this study demonstrate that a systems approach to investigating marital outcomes in stepfamilies provides a richer understanding than what would be revealed by studying couple interactions alone. While marital quality continues to be an important predictor of divorce in remarriages, the current study may be the first to show that dynamics within stepparent-child relationships provide an
important context for understanding marital stability. This study also revealed important relationships between marital distress and emotional distress that provide a mechanism through which remarriages dissolve. Karney & Bradbury (1995) argued that their VSA model of marital functioning has the advantage of providing a framework for investigating factors outside of the marriage itself such as physical health, depression, and child adjustment. The current study provides support for their argument that contextual factors should be examined in marital research because of the reciprocal nature that exists between marital outcomes and other indicators of physical, emotional, and social functioning.

**Limitations**

Despite the strengths in this study, there are important limitations that bear noting. First, the measure of (step)parent-child relationship quality employed in this study was based on a single item that was used to assess the level of tension between each (step)parent and each child. Although other studies investigating the effect of (step)parent-child relationships on stepfamily outcomes have also relied on single item measures similar to ours (e.g., Fine & Kurdek, 1995; Ganong & Coleman, 1988) it would be useful to replicate these findings with a multi-item measure of (step)parent-child relationship quality that may capture a richer understanding of the parent-child relationship. We made efforts to improve the reliability of our measure by aggregating multiple (step)parent-child tension scores across (step)children within each family to improve our estimate of global tension levels within each family. However, using a mean (step)parent-child tension score to represent the global tension levels within families also has limitations. It could be that there are differences between families in
which tension scores are relatively uniform (e.g., cluster closely to the mean) as opposed to families in which tension scores are distributed more broadly to the extreme ends of the spectrum. As such analyses were re-run choosing the “best” (e.g., lowest tension score) and “worst” (e.g., highest tension score) biological and stepparent-child tension scores within each family to examine the effects of the extreme parent-child relationships on marital outcomes. The pattern of results was the same across all analyses regardless of whether the best, worst, or average tension levels were used to represent (step)parent-child tension levels within families. These converging results strengthen the current findings by demonstrating that the effects of (step)parent-child relationships on marriages generalize across multiple operationalizations of (step)parent-child tension levels.

Despite the limitations noted above with respect to the assessment of family tension levels, there are benefits of this construct that bear noting. Using tension as a measure of (step)parent-child relationship quality has merit based on a literature that demonstrates stronger, more reliable effects of negatively valenced items (Baumeister et al., 2001). In studies of close relationships in particular, negative relationship factors have repeatedly demonstrated more reliable effects on relationship outcomes (Baumeister et al., 2001). For example, in the marital literature, negative behaviours in laboratory-based couple discussions were stronger predictors of relationship quality relative to positive behaviours (Gottman, 1994). Similarly, a study that predicted divorce from early marital interactions found that negative interactions and distress early on in marriage differed significantly for participants who subsequently divorced relative to those who remained married; positive interactions in early marriage (e.g., affectionate
communication) did not differ for couples who eventually divorced or remained married (Huston et al., 2001). Further, research has demonstrated that even though negative interactions may occur less frequently than positive interactions, they exert stronger effects on well-being (Rook, 2001). While there is an abundance of research that supports the potency of negative valenced predictors of various outcomes, it has also been demonstrated that negatively valenced predictors are particularly robust predictors of negatively valenced outcomes specifically (Rook, 2001). Therefore, the selection of tension as a predictor variable was fitting given that the outcome in the current study, divorce, is also negatively valenced. So despite our reliance on a single measure of (step)parent-child relationships, it is likely that our chosen measure had reasonable power to capture the association between (step)parent-child relationship functioning and marital functioning. That said, future research should consider additional indicators of (step)parent-child relationship functioning such as measures of time spent together doing shared activities.

Following from this, it would also be useful to investigate (step)parent-child interactions as they unfold in day-to-day life, to add to the current results that were based on a global assessment of (step)parent-child relationship quality. The stress-divorce model of marital outcomes argues that chronic daily stressors are important predictors of marital outcomes (Bodenmann et al., 2007) and previous findings from earlier phases of this stepfamily study revealed that the ways in which parents cope with daily stressors had important effects on the quality of parent-child relationships. The findings revealed that parental withdrawal from a family stressor on one day resulted in decreased parent-child tension the next day. However, the same withdrawal from
family stressors predicted increased tension two years later (DeLongis & Preece, 2002). This evidence that daily stress and coping processes within stepfamilies affect tension levels between (step)parents and children combined with the current evidence that (step)parent-child relationships bear influence on divorce outcomes suggest that a fuller investigation of daily stepfamily interactions is important for understanding remarriage outcomes.

As is to be expected in longitudinal research, we lost a proportion of our participants (27% of the original sample) to attrition. Fortunately, the proportion of participants that were retained was quite reasonable given the length of this study. Further, analyses revealed that the initial and final samples were comparable on demographic and predictor variables. As noted by Hunt and White (1998) in their discussion of health related longitudinal research, one of the particular concerns in longitudinal research is the loss of participants because they have developed the disease of interest or died. That is, longitudinal research faces bias when the outcome variable is confounded with subject attrition. In the case of our outcome, this concern holds considerable of merit due to natural consequences of divorce such as name changes and moves that would make divorced individuals more difficult to track. However, just as health related research draws from disease/death registries to obtain data, we were able to track additional participants through the use of divorce registries. This likely helped to improve the representation of the “hard to find” participants who otherwise would be at the highest risk of attrition. Losing “hard to find” participants in particular can decrease power and add bias to odds ratios (Hunt & White, 1998) which made the use of divorce records an important part of our procedure. Although many
other steps were also taken to improve our contact rate (e.g., using online search tools, obtaining contact information for friends/family who could provide whereabouts) additional steps could improve future attempts to predict divorce in stepfamilies. Most notably, maintaining regular (yearly) contact with participants would be ideal. This would allow additional advantages such as estimating trajectories of study variables.

Power was also a concern in this study. Although there was adequate power to investigate the current research hypotheses, our sample size limited our investigation of certain moderators that may improve our understanding of the stepfamily system. Most notably, it would be ideal to investigate gender of parents and children, as well as child age as potential moderators of the relationships uncovered in this study. Because not all families had family members that varied on these moderators (e.g., stepsons and stepdaughters) the number of families that would be available for these analyses was unacceptably low. Gender and age have been investigated in numerous large, nationally representative studies of stepfamilies; however, none of those studies have followed participants long enough to measure divorce as an outcome. There is mounting evidence to suggest that this is an important direction for future research.

The literature examining stepparent gender, for example, has revealed that the stepmother-stepchild relationship tends to be more difficult than the stepfather-stepchild relationship. Ihinger-Tallman and Pasley (1997) provided numerous reasons for this difference including the fact that biological mothers remain more involved with their children, which conflicts with the stepmothering role. In addition, traditional gender roles that result in women doing more caretaking and childrearing may conflict with expectations that biological fathers assume more caregiving responsibility for their
children. Consistent with this, research has revealed that when the fathers’ children visited the home, stepmothers, as opposed to the children’s father, reported assuming much of the extra responsibility for childcare and housework (Ambert, 1986; Guisinger et al., 1989). By contrast, stepfamilies comprised of mothers and stepfathers do not likely include similar parenting expectations for stepfathers. One study found that mothers and stepfathers both expected less stepfather involvement with children early on in a remarriage (Bray & Berger, 1993). In that study, marital satisfaction early on in remarriage was greater for both partners when stepfathers were not expected to assume a parental role or establish close relationships with stepchildren.

In addition to stepparent gender, the gender of children may be an important predictor of marital outcomes. Bray and Berger (1993) conducted a multimethod study that employed self-report and behavioural analysis as well as cross-sectional and longitudinal data with mothers, stepfathers, and children. They examined (step)parent-child interactions with a behavioural coding system that assessed warmth, hostility, assertiveness, coercion, self-disclosure, mood, and transactional conflict. They found that stepfather-stepdaughter interactions were more negative relative to stepfather-stepson interactions. A similar finding emerged from a longitudinal study that examined relationships between adolescent children and their mothers and stepfathers. Adolescent girls had poorer relationships with their stepfathers relative to adolescent boys; the girls were more likely to withdraw or avoid their stepfathers and had more extended conflicts with them (Vuchinich, Hetherington, Vuchinich, & Clingempeel, 1991). These authors suggested that this finding is consistent with the notion that adolescent girls may hold more resentment toward their stepfathers given that past
research (e.g., Hetherington, 1989) has found that problem behaviour in teenage girls is
positively associated with the level of closeness in mother-stepfather relationships. In
addition, it has been found that stepfather’s positive behaviour toward stepdaughters
does not correlate with stepdaughter’s acceptance of their stepfathers; no matter how
hard stepfathers tried to gain their stepdaughter’s acceptance in a longitudinal study of
mother-stepfather families, they were rejected by their stepdaughters (Hetherington, 1989).

The studies discussed above are notably all mother-stepfather families. Thus it is
unclear whether it is the stepfather-stepdaughter dyad specifically, or stepparent-
stepdaughter dyad in general that faces more strain within stepfamilies. The former
confounds stepparent and stepchild gender, whereas the latter refers to the effect of
stepchild gender, regardless of stepparent gender. One study that included stepfather
families as well as stepmother families found that girls had more behavioural and
emotional problems when in a mother-stepfather families relative to father-stepmother
families (Lee, Burkam, Zimiles, & Ladewski, 1994). Given the much higher prevalence
of biological mother-stepfather families, the majority of research confounds the gender
of the stepparent with the gender of the stepchild when studying the effects of stepchild
and stepparent gender on stepfamily functioning. Lee and her colleagues removed this
confound from their study by examining stepparents of both genders and their results
suggest that child gender and (step)parent gender are both important stepfamily factors.

The importance of the stepparent-stepchild dyad may also be influenced by the
child’s age at the time of remarriage. The stages of child development between infancy
and adolescence are each filled with unique parenting challenges; however, there is
evidence that stepparent-stepchild relationships are more positive when children are younger (Dunn, Davies, O'Connor, & Sturgess, 2000). In addition, it has been found that stepparenting behaviour is more similar to biological parenting when children are younger (Ihinger-Tallman & Pasley, 1997). These findings are consistent with the majority of research showing that adolescence brings about more difficulty in stepfamily relationships.

Stepfamilies with adolescents report more conflict relative to stepfamilies with younger children (Coleman et al., 2000; Ganong et al., 2006) and conflict has been proposed to be a source of higher divorce rates in remarriages (Hobart, 1991). A study that examined both stepfamilies and nuclear families found that family cohesion decreased in both family types when children reached adolescence; however, the decline was more pronounced in stepfamilies (Bray & Berger, 1993). Data from a longitudinal study of divorce and remarriage also identified adolescence as a difficult period for all stepfamily members; when children in stepfamilies reached adolescence it was found that parents reported increasing levels of negative life stress and children experienced emerging and/or intensifying adjustment difficulties (Hetherington, 1993). In that study, stress and conflict in stepfamilies was even greater when children were at least 9 years of age when remarriage occurred.

Establishing and maintaining good stepparent-stepchild relationships during adolescence may be difficult because adolescents may be more resistant to accepting authority from a stepparent relative to younger stepchildren (Ganong et al., 2006). Also it would be reasonable to predict that in stepfamilies with young children, the bond between stepparent and stepchild would have more time to develop and may include a
greater shared history, akin to that of a biological parent. In this way, younger age of children at time of remarriage would predict improved marital outcomes. Contrary to this, increased stress and decreased family cohesion suggest that stepfamilies with adolescents may be at increased risk for dissolution; however, this has not been adequately addressed with prospective research and should be a focus of future research.

Finally, it is important to note that the focus of the current study was on family context; however, this does not preclude the importance of investigating the role of individual difference and couple factors that bear influence on marital stability. As alluded to throughout the discussion, factors such as attributional style, attitudes toward marriage and divorce, and personality characteristics present important directions for future research on remarriage stability. For example, it has been found that remarried individuals hold more positive attitudes toward divorce relative to first-married couples, which predicts increased divorce proneness (Whitton et al., 2013). Based on the VSA model, individual difference factors such as these could be considered vulnerabilities that spouses bring into remarriages. As such, these factors can be easily integrated with the broader contextual framework provided by the VSA model in order to investigate the complex interplay of factors that influence remarriage outcomes.

Conclusions & Implications

To conclude, it is noteworthy that the literature provides few norms for stepfamilies to follow in the formation and maintenance of stepfamily relationships; as a result, the nuclear family continues to be held up as the model for success (Ganong et al., 2006). Unfortunately this does not capture the diversity of stepfamilies and the
complexity of relationships within them. The success of first-marriage relationships is often described in terms of marital dyad factors (e.g., communication and affect between partners). The current study revealed the importance of broadening the lens to include the stepfamily context in investigations of stepfamily stability. Whereas the current study focused on “context” from the vantage point of external factors that bear influence on the marital relationship, our findings should not be interpreted as evidence that this is the only direction in which contextual factors and marital relationships interact (see Surra & Perlman, 2003 for a discussion of relevant contextual frameworks). As Surra and Perlman point out, “partners mold the structures that constrain them” which reminds us that not only does the stepfamily context affect the marriage, but the marriage reciprocally affects the stepfamily system.

Systems theory and contextual models of divorce are important frameworks for research in this field but further to this, these models should inform clinical interventions for distressed couples in stepfamily contexts. Just as it is important for researchers to look beyond behavioural interactions between remarried couples, it will be especially important for marriage therapists to conceptualize couple problems within the context of the entire stepfamily system. Currently, clinical interventions for prevention and treatment of couple relationship problems in the context of stepfamily living are extremely limited (Whitton, Nicholson, & Markman, 2008). These findings implore clinicians to explore the family stressors that arise in the stepfamily system and the quality of additional stepfamily dyads that spillover and affect the quality of the marital dyad. It is likely that efforts to reduce tensions within (step)parent-child relationships would benefit the marital relationship. This study shines a light on exciting avenues for
applied stepfamily research. As we begin to uncover more of the systemic effects of stepfamily functioning on marital functioning, stepfamily interventions can be empirically tested for their effectiveness in improving the stability in remarried couples.
References


Whitton, S. W., Stanley, S. M., Markman, H. J., & Johnson, C. A. (2013). Attitudes toward divorce, commitment, and divorce proneness in first marriages and


Appendix A

Table 6: Descriptive Statistics for Three Quantifications of (Step)parent-Child Tension—Highest (Step)parent-Child Tension Scores in the Family, Lowest (Step)parent-Child Tension Scores in the Family, and the Average (Step)parent-Child Tension Scores for the Family.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio Tension – High Target</td>
<td>1</td>
<td>5</td>
<td>2.74</td>
<td>1.13</td>
</tr>
<tr>
<td>Bio Tension – Low Target</td>
<td>1</td>
<td>4</td>
<td>1.34</td>
<td>0.61</td>
</tr>
<tr>
<td>Bio Tension – Mean*</td>
<td>1</td>
<td>4</td>
<td>1.94</td>
<td>0.65</td>
</tr>
<tr>
<td>Step Tension – High Target</td>
<td>1</td>
<td>5</td>
<td>3.02</td>
<td>1.09</td>
</tr>
<tr>
<td>Step Tension – Low Target</td>
<td>1</td>
<td>4</td>
<td>1.95</td>
<td>0.81</td>
</tr>
<tr>
<td>Step Tension – Mean*</td>
<td>1</td>
<td>4</td>
<td>2.49</td>
<td>0.77</td>
</tr>
</tbody>
</table>

* “Bio Tension – Mean” and “Step Tension – Mean” were used in all analyses that are reported in the results section. All study analyses were replicated with High and Low Target Tension scores; key results are presented below.

As noted in Table 6, all analyses that were conducted with mean family tension scores were replicated with high and low target tension scores. Overall, the pattern of results for analyses that are reported in the results section using mean tension scores is comparable to the pattern of results revealed from analyses with high and low target tension scores. Consistent with the analyses based on mean levels of tension, there were no main effects of biological parent-child tension or stepparent-child tension on divorce outcomes when these analyses were replicated with high and low target tension scores (see Table 7). Also consistent with the analyses based on mean scores, biological and stepparent-child tension interacted to predict divorce when the high biological and
stepparent-child target tension scores were used. In contrast, the low tension
target scores did not reveal a significant biological x stepparent-child interaction;
although the direction of this effect was consistent (see Table 7).

Table 7: Stepwise Logistic Regression Results for the Prediction of Divorce from
the Stepfamily Context.

<table>
<thead>
<tr>
<th>Time 1 Predictor</th>
<th>$\chi^2$</th>
<th>$B$</th>
<th>SE $B$</th>
<th>$e^B$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1a</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: 5.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.46*</td>
<td>0.21</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>Bio Tension - High</td>
<td>-0.12</td>
<td>0.21</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>Step Tension - High</td>
<td>0.10</td>
<td>0.22</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>Step 2: 6.56**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.39*</td>
<td>0.22</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Bio Tension - High</td>
<td>-0.16</td>
<td>0.23</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Step Tension - High</td>
<td>0.08</td>
<td>0.23</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>Bio X Step Tension - High$^a$</td>
<td>-0.54*</td>
<td>0.22</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td><strong>Model 1b</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: 6.30$^i$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.35$^i$</td>
<td>0.23</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>Bio Tension - Low</td>
<td>0.28</td>
<td>0.22</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>Step Tension - Low</td>
<td>-0.02</td>
<td>0.22</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>Step 2: 0.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.35$^i$</td>
<td>0.23</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Bio Tension - Low</td>
<td>0.32</td>
<td>0.23</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>Step Tension - Low</td>
<td>0.01</td>
<td>0.22</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Bio X Step Tension - Low$^a$</td>
<td>-0.14</td>
<td>0.20</td>
<td>0.87</td>
<td></td>
</tr>
</tbody>
</table>
Note: $N = 112$. $e^B$ = Odds ratio = the odds of divorce given a 1-SD change on the predictor item. * Tests of interactions were 2-tailed whereas tests of main effects were 1-tailed. $^* p < .10$, $^* p < .05$, $** p < .01$, $*** p < .001$

Consistent with the analyses reported in the results section based on mean tension levels, a marginally significant interaction was found between stepparent-child tension and marital quality when the high stepparent-child target tension score was used. When the lowest stepparent-child tension score was selected as the target score, the pattern of results was the same but the interaction met full statistical significance (see Table 8).  

Finally, consistent with the models based on mean tension levels, Time 2 depression and marital satisfaction did not mediate any of the significant interaction effects involving target stepparent-child tension scores.

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$^{14}$ Although it was not anticipated that biological parent-child tension would predict divorce, the interactions between biological parent-child high tension target X marital quality and biological parent-child low tension target X marital quality were also tested and consistent with the analyses based on average tension levels, neither interaction with target tension scores was significant.
Table 8: Hierarchical Logistic Regression Results for the Prediction of Divorce from the Steftamily Context.

<table>
<thead>
<tr>
<th>Time 1 Predictor</th>
<th>( \chi^2 )</th>
<th>B</th>
<th>SE B</th>
<th>e^B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 2a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td>4.73(^\ddagger)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.43*</td>
<td>0.21</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>Step Tension - High</td>
<td>0.07</td>
<td>0.21</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td>1.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.45*</td>
<td>0.21</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>Step Tension</td>
<td>0.03</td>
<td>0.21</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Step Tension - High X</td>
<td>0.27(^\dagger)</td>
<td>0.21</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>Marital Quality(^a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2b</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td>4.61(^\ddagger)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.43*</td>
<td>0.22</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>Step Tension - Low</td>
<td>0.01</td>
<td>0.21</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td>4.00*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Quality</td>
<td>-0.43*</td>
<td>0.22</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>Step Tension - Low</td>
<td>0.06</td>
<td>0.22</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Step Tension - Low X</td>
<td>0.47*</td>
<td>0.25</td>
<td>1.60</td>
<td></td>
</tr>
<tr>
<td>Marital Quality(^a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: \( N = 112 \). \( e^B \) = Odds ratio = the odds of divorce given a 1-SD change on the predictor item. \(^a\) Tests of interactions were 2-tailed whereas tests of main effects were 1-tailed. \(^\ddagger\) \( p < .10 \), \(^*\) \( p < .05 \), \(^**\) \( p < .01 \), \(^***\) \( p < .001 \)