EXAMINING PREMISES OF BOUNDARY AMBIGUITY AND PROPOSING BOUNDARY CONSENSUS AS A CONCEPT

by

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ABSTRACT

This study fills a gap in the literature by examining premises of boundary ambiguity theory. First, whether boundary ambiguity is a family or individual construct is measured by testing family functioning as the dependent variable. Second, family membership and structure measures agreement on boundaries as it relates to family functioning. Boundary consensus is a proposed variable herein that examines perceived agreement on family boundaries. Each of these variables will be tested for the first time as dependent variables on the variable parent marital status, which is a group of students whose parents have separated/divorced, compared to students whose parents in their first union/marriages. Data were collected from university undergraduate classes with 130 students having parents in their first marriages and 30 having parents who had separated/divorced. Multiple regression was used to test the hypotheses. Results indicate that parent marital status is a predictor of both boundary ambiguity and family membership and structure, and that these two variables also predict students' family functioning. Boundary consensus is significantly related to parents' family functioning. The findings uphold certain premises of Boss' boundary ambiguity theory and implicate areas for improvement. The findings also suggest further research on boundary consensus to explore its possibility as a concept.
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CHAPTER I
INTRODUCTION

The central purpose of this study is to examine Pauline Boss’ theory surrounding the Boss and Greenberg (1984) concept of boundary ambiguity. While Boss and other researchers using the concept have conducted many studies, no study to date has examined basic premises of the theory. Boundary ambiguity, boundary consensus, and agreement on family membership and structure are used as both independent and dependent variables and family functioning as a dependent variable. Parent marital status is used as an independent variable to test for differences between two groups: respondents whose parents are in their first marriage/unions (nuclear families) and respondents whose parents have separated or divorced.

Boundary ambiguity refers to family circumstances in which family members are “uncertain in their perception about who is in or out of the family and who is performing what roles and tasks within the family system” (Boss & Greenberg, 1984, p. 536). This concept will be explained and origins of the concept will be reviewed. A discussion will be initiated around Boss’ claim that boundary ambiguity is a family construct. This claim will be examined by testing the relationship between boundary ambiguity and family functioning. The boundary ambiguity scale for adult children of divorce (BAS-4) has not been tested in published research. Furthermore, none of the boundary ambiguity scales have been developed for families in which boundary ambiguity is expected to be low. The BAS-4 will be modified to test for boundary ambiguity in both high and low risk circumstances, that is, on adult children in separated or divorced versus nuclear families.

Boundary consensus is proposed as a concept in this thesis and tested. Boundary consensus is defined as an individual’s perceived agreement with the family on persons who
are physically entering and exiting the family space and with perceived roles to perform when these persons are present or absent. As will be discussed, boundary consensus combines role consensus, consensus, and boundary permeability. A scale has been developed to test this concept. Differences between nuclear and divorced families will be tested. The relationship boundary consensus has to family functioning will be examined for the purpose of testing the applicability of the concept.

A scale to test boundary ambiguity in stepfamilies has been utilized by some researchers. In this thesis it is suggested that this version of boundary ambiguity does not capture boundary ambiguity but captures family membership and structure. Reasons for this re-labeling will be discussed and applied to the sample in this study. Differences between nuclear and divorced families will be tested. An assumption stated in Kaplan and Boss (1999) and Boss (2002) that family membership and structure influences family functioning will be tested.

The 6 hypotheses are tested using multiple regression. Reliability of the independent and dependent variables are measured with Cronbach’s alpha. A sample of students attending a select number of undergraduate classes at the University of British Columbia and their parents are used to test the above hypotheses. All 6 hypotheses are tested on the student sample. Post hoc analyses tests 2 of these hypotheses on the students’ parents. Quota sampling was used to obtain a sufficient sample size of the target population of adult children of a separation or divorce residing at home and their residential parent.
CHAPTER II

REVIEW OF THE LITERATURE

Boundary Ambiguity

Boundary ambiguity refers to family circumstances in which family members are "uncertain in their perception about who is in or out of the family and who is performing what roles and tasks within the family system" (Boss & Greenberg, 1984, p. 536). Two sub-dimensions of boundary ambiguity are first, family members’ physical presence or absence and second, family members’ psychological presence or absence. For example, this concept explains family stress events where a family member can be psychologically present in the family but physically absent, such as when a military father/mother has been declared “missing in action” (see Boss, 1980a). Alternatively, boundary ambiguity has been applied to Alzheimer’s disease where a patient is physically present in the family but psychologically absent. In both situations, there may be a lack of clarity regarding the description of one’s roles such as what one should do and how to act. Boundary ambiguity, then, can be a source of stress in families resulting in individual depression and/or family conflict (Boss, 1991) because the ambiguity around role restructuring in the family due to the event makes it difficult to keep the family running (Boss & Greenberg, 1984).

Experiences of boundary ambiguity can be triggered as a result of changes and space or time. For instance, someone can be physically absent but psychologically present in the family. Family membership is altered due to geographical space, such as in the case of a father who works overseas to support his family. Family membership could also be altered across time demonstrating a family’s adherence to the way the family functioned in hindsight, such as when a family member has passed away, or foresight, when a family anticipates the departure of one of its members. Alternatively, someone can be physically present but psychologically absent. Family membership is altered due to time, such as when
a member acquires dementia and the family defines this member as not psychologically part of the family.

It is important to outline some major origins of boundary ambiguity theory. Three main areas of study are described: symbolic interactionism, family therapy, and systems theory (Boss & Greenberg, 1984).

Symbolic interactionism was incorporated into the theory of boundary ambiguity in two ways. First, the early revolutionary work of S.I. theorists Thomas and Thomas, as cited in Boss and Greenberg (1984), stated that if a situation is defined as real, it is real in its consequences. As a result of this work, an emphasis emerged in the field of sociology on perceptions and their influence on interactions. Thus, Boss incorporated the importance of perceptions into boundary ambiguity theory. Second, while not explicitly mentioned in Boss’ work, it is noted here that the definition of boundary ambiguity encompasses the concept of role clarity. Cottrell (1942), as cited in Burr, Leigh, Day and Constantine (1979), developed the concept *clarity of role expectations*, which today is called role clarity. There is a lack of role clarity if individuals are unsure how to perform a role because the expectations for that role are, in reality or are perceived to be, unclear. In contrast, role clarity is the experience of individuals who are sure how to perform a role because the role expectations are, in reality or are perceived to be, clear. Role clarity can be measured by assessing clarity around who is performing what roles, and how, when, and why these roles are performed. Thus, the second half of the definition of boundary ambiguity encompasses role clarity: “who is performing what roles and tasks within the family” (Boss & Greenberg, 1984, p. 536). In sum, symbolic interactionism is an important theoretical source for the development of boundary ambiguity theory.

Family therapy is a second contributor to boundary ambiguity theory that also utilizes the perceptual factors described in symbolic interactionism. Boundary ambiguity draws upon
three underlying areas: Minuchin's work, symbolic-experiential therapy, and family stress theory (Boss & Greenberg, 1984; Boss, 2002). Minuchin (1974) examines a lack of clarity of the internal family boundaries as a qualifier of dysfunctional families. Symbolic-experiential therapists, broadly speaking, focus on perceptions of family membership and structure that have both symbolic and physical meanings. That is, symbolic family membership and structure may or may not match up to the physical reality of membership and structure. Family stress theory is a third source drawn upon in family therapy by Boss (1993b; 2002). Reuben Hill's (1949) ABCX explains how stress evolves in the family system (McCubbin, Thompson, & McCubbin, 1996). In the basic model, factor A represents the event, B represents family resources, C represents the definition of the situation and X, the crisis. In the ABCX family model of stress, the "C factor," or herein referred to as the perceptual factor, describes the family's assessment of the seriousness of the given event and the consequence of hardship to determine whether to interpret the event as a stressor (McCubbin et al., 1996). While boundary ambiguity is an individual level variable, the perceptual factor can apply to any level of analysis (Boss, 1993b; Boss, 2002). It is a perception of the event that determines the level of boundary ambiguity and subsequent levels of stress (Boss & Greenberg, 1984).

Boss (1991) identifies two perceptual sources of boundary ambiguity within the family that can lead to high levels of stress. First, boundary ambiguity may arise when a family's perception of the situation does not reflect reality. Ambiguity arises because facts related to the event are ignored, which can be equated with the experience of denial. For example, a family member with advanced Alzheimer's may be considered by health care professionals to be psychologically absent, and yet the family functions as if that member were psychologically present. Second, boundary ambiguity may also occur when there is uncertainty about what is happening and, if in a crisis, how the crisis will end because facts related to the event are unclear. For example, in a family where parents are separated, it may
be unclear whether a divorce will indeed occur. The custodial parent may be so preoccupied with the loss that he/she may be perceived by the children to be psychologically absent although he/she is physically present. Boundary ambiguity assumes that the inconsistency among family members psychological and physical presence/absence is an indicator that there is a lack of clarity in family member’s roles. Lower levels of boundary ambiguity in the family, and hence lower levels of stress, occur when a member is perceived by other family members to be physically present in the family and psychologically present, or alternatively, when he/she is physically absent from the family and perceived to be psychologically absent. Higher levels of boundary ambiguity, and hence higher levels of stress, occur when a member is physically absent from the family but is perceived by one or more family members to be psychologically present, or when one is physically present in the family but is perceived as psychologically absent.

A third major origin of boundary ambiguity utilizes the concept of boundary from systems theory. An assumption of family systems theory is that all systems have boundaries (Klein & White, 1996) which are the “rules for who participates and how” (Minuchin, 1974, p. 53). Boundaries are often measured by their degree of permeability (Whitechurch & Constantine, 1993; Klein & White, 1996). The permeability of a boundary describes the point at which a system varies along a continuum from open to closed (Broderick & Smith, 1979). In other words, the permeability of a boundary describes the flow of information and energy into and out of a system (Klein & White, 1996). In the case of boundary ambiguity, the flow of energy, or people, into and out of the system is the focus. People enter and exit the family home, as does information exchanged by a variety of mediums including televisions, radios, newspapers and flyers. Different families will regulate the exchange of this information and energy in different ways.
In summary, symbolic interactionism, family therapy and systems theories are the building blocks for the boundary ambiguity theory. Broadly speaking, boundary ambiguity theory examines member's perceptions about their stressful situation in terms of ambiguity concerning roles and boundaries in the family.

Strategies for coping with boundary ambiguity include families taking initiatives and professional advice. Strategies of family initiatives include the family gamble, which incorporates the experience of denial (Boss, 1999). Instead of living with ambiguity, the family decides, for example, that a physically or psychologically absent member is non-existent or dead. For example, with the case of Alzheimer's disease, families may deny the ill member's physical presence, reducing the member to a state of non-existence or being dead (Boss, Caron & Horbal, 1988). Alternatively, in mild cases of Alzheimer's, the family may deny that the illness exists. A family's decision to employ the family gamble becomes a valid coping measure if there is little chance that the member will return (Boss, 1999). The gamble usually occurs when the family has experienced limbo for a length of time (Boss, 2002). Strategies for therapy include identifying, validating and clarifying the boundary ambiguity (Boss et al., 1988), which includes having families talk about their definition of the situation, whether they agree or not on the definition, and about role taking during the stage of ambiguity (Boss, 1993b). Intervention also consists of encouraging families to accept change (Boss, 1999).

Boundary ambiguity has been used to study a range of normative and non-normative family life events. Initially, boundary ambiguity was measured with wives of men missing in action (MIA wives) where their husbands were physically absent but psychologically present. Since then, main areas where boundary ambiguity has been applied by Boss and colleagues include: situations of war (Boss, 1999), immigration (Boss, 1993a), widowhood (Blackburn, Greenberg & Boss, 1987), adolescent home leaving (Boss, Pearce-McCall &
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Greenberg, 1987) and Alzheimer’s disease (Boss et al., 1988; Boss, Caron, Horbal & Mortimer, 1990a). Other researchers have also applied boundary ambiguity to illness, parenthood, divorce, remarriage, adoption, infertility, child daycare, foster care, substance abuse, death, clergy families, and political unrest.

**Boundary Consensus**

The purpose of this section is to introduce the concept boundary consensus. Boundary consensus is defined as an individual's perceived agreement with the family on persons who are physically entering and exiting the family space and with perceived roles to perform when these persons are present or absent. The theoretical framework of boundary consensus and examples of the utility of the concept in situations of boundary ambiguity will be delineated.

The later half of the definition of boundary consensus incorporates role consensus. While there is no consensual definition of a role (Burr et al., 1979), for the purpose of this paper, a role is defined as a set of normative behaviors and expectations for an individual occupying a given social position performing a set of instrumental or expressive tasks in everyday life. Role consensus, studied from a symbolic and role theory perspective, has been the focus of research attention in the sociological and family studies literature. Synonyms in role theory for role consensus include validation, consensus, social reality and shared expectations with antonyms including conflict and dissensus. Burr et al. (1979) define role consensus from a symbolic interactionist perspective as whether there is consensus among actors for the expectations of a given role. This definition of role consensus could be utilized to examine systems theory’s concept of boundary permeability. This proposition is explained in brief.

The first half of the definition of boundary consensus incorporates both boundary permeability and consensus. The permeability of a boundary, as described above, describes
the flow of information and energy into and out of a system (Klein & White, 1996).

Researchers and family therapists have applied both boundary permeability and consensus to the study of the family. Research on boundary permeability focuses on either the 'principle or perceived threat' to understand why some families are more open than others (Broderick, 1993), or emotional connectedness among members, which is often measured using Olson's Circumplex Model (Whitechurch & Constantine, 1993). Interestingly, while it is well known that families strive to negotiate a consensus about their boundary's permeability (Anderson & Sabatelli, 1999), consensus on boundary permeability is not explored in the boundary permeability literature. Consensus about boundary permeability could be described as consensus among actors for the expectations of the way the system boundary is operationalized. Thus, different members of the family may have very different expectations for the maintenance of family boundaries. It is suggested that further exploration on consensus about boundary permeability would fill a gap in the literature.

Boundaries of the home may be non-permeable, semi-permeable or very permeable. It is possible that one or more family members may not agree with other family members on the degree of boundary permeability maintained by the family. In situations of separation, for example, where one spouse resides with an adult child pursuing post-secondary education, not only will each spouse have ideas about the way the boundaries should operate but also so may the adult child. With a number of people, each possibly having their own ideas about the way boundaries should operate it is possible that they may disagree.

Families use a broad range of strategies to maintain their existing level of boundary permeability. Using a clinical sample, Kantor and Lehr (1975) formulated a theory about the way families establish, maintain, and regulate boundaries. As is explained in the measures section, boundary consensus is the phenomenon of an individual's perceived agreement with other family members on the family's spatial and temporal territory. It is assumed here that
if an individual disagrees with his/her family's degree of boundary permeability (ranging from not to very permeable), that he/she will be in disagreement with the strategies the family employs to maintain its boundaries. These strategies are reviewed when describing boundary consensus in the measures section.

The boundary consensus scale asks the respondent the extent to which he/she has agreement with their family on indicators of consensus about boundary permeability and role consensus. Boundary consensus measures perceived (and not actual) agreement with other family members, as the concept is assessed at the individual level of analysis. The two perceptual sources of boundary ambiguity could be applied to boundary consensus. Recall these sources are first, that the situation does not reflect reality, or second, when facts related to the event are unclear (Boss, 1991). A lack of consensus is perceived in either situation: if an individual perceives disagreement, in spite of agreement, or if it is unclear as to whether or not there is agreement.

A high level of boundary consensus means that one or more family members are perceived by the actor to have consensus on the way external boundaries and related roles are maintained. With boundary consensus, it is assumed that family members are psychologically present or absent depending on whether they are in agreement with other members on the way external boundaries are maintained in the family and the way roles are performed. That is, the premise is that perceived agreement about external boundary maintenance and roles is equated with an atmosphere that is psychologically supportive, thus promoting family functioning.

Circumstances that give rise to boundary ambiguity may also give rise to boundary consensus. To provide additional rational for the utility of the concept, it is suggested that boundary consensus could be examined in circumstances of boundary ambiguity. Boss has left unclear the relationship between consensus in the family surrounding the
operationalization of external boundary maintenance and boundary ambiguity. That is, boundary ambiguity in the family sometimes involves a person from a formal or informal support system or a family member who is repeatedly entering and exiting the family system.

Take the example of a family member with dementia. This situation may lead to boundary ambiguity in the family when one or more members are uncertain in their perception if the member with dementia is in fact, a functioning member of their family and also there may be a lack of clarity in the role these members have in relation to performing any caretaking activities required. Boundary consensus could measure whether members agree on the changes in roles and on the changes in how the boundaries of the system are operationalized. For example, private homecare workers may enter the home, which may change family functioning. Boundary consensus measures an individual's agreement on items such as the duration, timing, and frequency of the homecare worker’s visits and the roles and tasks one is to perform when the worker is present or absent. Alternatively, a family member could be physically absent but psychologically present. In situations of separation or divorce, one parent lives away from his/her child but for the child, the physically absent parent may be psychologically present. Depending on how the residential parent sets rules for his/her spouse to enter the space of the family home, the non-residential parent may be entering the home on a range from infrequently to frequently and individual members may agree or disagree with these visits. The changes in family dynamics caused by the separation may lead to changes in roles individuals are to perform, with which the individual may not be in consensus. Therefore, boundary ambiguity and boundary consensus may occur in similar circumstances. It should be made clear, however, that no direct relationship is proposed between boundary ambiguity and boundary consensus. While the two variables may be somewhat correlated, it is not expected that boundary ambiguity would predict boundary consensus.
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Family Membership and Structure: A Critical Appraisal

A measure of boundary ambiguity in blended families developed by Pasley and Ihinger-Tallman (1980) that is published in Pasley (1987) and Pasley & Ihinger-Tallman (1989) is discussed below. It is proposed that this measure captures two concepts, agreement on family membership and agreement on family structure, and not boundary ambiguity, as Pasley and Ihinger-Tallman claim. Therefore, the measure will not be used in this thesis to measure boundary ambiguity. The measure is used to test a hypothesis about boundary ambiguity proposed by Kaplan and Boss (1999) and Boss (2002) that is suggested in this thesis to relate to Pasley and Ihinger-Tallman’s version of boundary ambiguity, relabelled herein as family membership and family structure.

As will be described in the measures section, the Boundary Ambiguity Scales presently describe six different scales measuring boundary ambiguity in a variety of circumstances. Briefly, the scales measure whether a psychologically or physically absent family member is correctly perceived by an individual to be present or absent. Referring to the Boundary Ambiguity Scale for caregivers labelled the BAS-6, Kaplan and Boss (1999) state, “the premise of the scale is that if family members do not have an overtly or covertly agreed-upon perception of who is in or out of the family, they will be more immobilized in functioning” (p. 92). Stated slightly differently, Boss (2002, p. 102) states that: “it is not necessary that all family members view absence and presence in precisely the same way, but there needs to be some degree of agreement for the family to function well and without conflict.” From these two statements, it could be concluded that Kaplan and Boss (1999) and Boss (2002) propose that there needs to be some degree of actual agreement among family members about who is perceived to be psychologically part of the family and physically part of the family in order to enhance optimal family functioning. While boundary ambiguity captures the perceived agreement by a family member about who is
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perceived to be psychologically part of the family and physically part of the family, the
proposition of actual agreement has not been tested. Two variables appear to be suggested
by the proposition concerning actual agreement: family membership (who is psychologically
part of the family) and family structure (who is physically part of the family). Recall from
the review on boundary ambiguity (p. 4) that family membership and family structure are
concepts explored in symbolic-experiential therapy. Symbolic-experiential therapists,
broadly speaking, focus on perceptions of family membership and structure that have both
symbolic and physical meanings. That is, symbolic family membership and structure may
or may not match up to the physical reality of membership and structure. Research exists on
both of these concepts. Family structure is greatly explored in the literature as it refers
either to the family constellation or lifespan literature, or to structural changes following
separation, divorce or loss. Agreement about family structure is less researched. Agreement
on family membership has been explored in other research. The variable assesses family
boundaries according to the people that respondents include in their family.

Some research on family membership exists and pertains to step parenting and foster
care (Gardener, 1998). Gardener (1998) states that the Kvebaek Family Sculpture
Technique (KFST) was originally designed by Kvebaek and colleagues in 1973 to ask
respondents whom they consider as family members but was later expanded to study
hierarchical relationships and cohesion. The KFST is a qualitative measure and as such, will
not used in this study. However, the variable agreement on family membership appears to
be measured in an unpublished study by Pasley and Ihinger-Tallman (1980) as cited in
Pasley (1987), in Pasley (1994), and in Pasley and Ihinger-Tallman (1989). In all of these
works, however, the variable is labelled boundary ambiguity.

Pasley and Ihinger-Tallman (1989) changed boundary ambiguity from an individual
measure to a dyadic measure to assess a couple’s congruence on measures of psychological
and physical presence. That is, this version of boundary ambiguity measures a couple’s *actual agreement* on whom each person considers to be their family members (psychological dimension) and has a structural component which asks who is living with them (physical dimension). Actual agreement here is what Biddle (1979) terms shared consensus, which is the correct attribution of similar expectations among people. Biddle and Thomas (1966) define consensus as the “degree of agreement among individuals on a given topic” (p. 33), which can refer to either sameness in commonly held norms or sameness of behavior. Stated slightly differently, if two or more people have similar expectations, they are in consensus (Biddle, 1979). Consensus is a shared reality and can contrast to perceived agreement in which an actor correctly or incorrectly attributes agreement on similar expectations between themselves and another party. Consensus has been the focus of much research with theoretical and methodological development of consensus originating in such works as that of Laing, Phillipson, and Lee (1966) who developed the Interpersonal Method (IPM), which applies a three level of analysis to measure the difference between actual and perceived agreement in the dyad. For conceptual clarity, the term consensus will be used when examining the variable agreement on family membership and refers to actual agreement, or in Biddle’s (1979) terms, shared consensus.

Results include Pasley and Ihinger-Tallman (1989) finding no significant differences between low and high boundary ambiguity stepfamily couples on a variety of dependent variables measuring marital adjustment and integration. They speculate that one among many possible reasons for this non-significant finding relates to problems with the scale not capturing the complexity of stepfamily boundaries and call for a new scale to be developed. However, with a different sample of stepfamily couples, the same scale was used to measure boundary ambiguity (Pasley, 1994). Approximately 40% of couples experienced some sort
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of boundary ambiguity. The research herein would like to pursue whether this measure actually captures boundary ambiguity.

On Pasley and Ihinger-Tallman's (1980, unpublished) 3-item dyadic measure that was tested on stepfamilies, one question assesses what is labelled as the psychological sub dimension of boundary ambiguity by asking the respondents to list the people whom they consider as family members. Two questions assessed what is labelled as the physical sub dimension: first, to identify who lives in the home; and second, to identify the children or stepchildren who do not live in the home. On the physical sub dimension, “spouses who did not report the same children were designated as having high physical ambiguity” (Pasley, 1987, p. 218). Each pair is given a score of either low or high on each of the dimensions. A pair of respondents from the same household who agree on both the psychological and physical dimensions have low boundary ambiguity (“low psychological + low physical”) and those who disagree on both the dimensions have high boundary ambiguity (“high psychological + high physical”). A pair of respondents who agree on the psychological but disagree on the physical dimension are labelled “low psychological + high physical.” Alternatively, disagreement on the psychological but not the physical dimension results in “high psychological + low physical.” For example, a couple could have low psychological boundary ambiguity, meaning they considered the same persons to be family members and high physical boundary ambiguity, meaning each partner’s list of who lived in and outside of the home did not correspond, and visa versa.

It is in the researcher’s opinion that Pasley and Ihinger-Tallman's (1980, unpublished) measure is complementary rather than synonymous to boundary ambiguity. It appears that what is being measured is consensus on who is considered to be in the family, or family membership, as well as who is actually in the family, or family structure rather than boundary ambiguity. Agreement on family membership is a measure that combines the
concept of consensus with a concept that is a source of origin for Boss’s boundary ambiguity from symbolic-experiential therapy. Recall from the origins of boundary ambiguity above that symbolic-experiential therapy, broadly speaking, focuses on perceptions of family membership and structure that has both symbolic and physical meanings. That is, symbolic family membership and structure may or may not match up to the physical reality of membership and structure. According to Pasley and Ihinger-Tallman (1989), the psychological dimension of the boundary ambiguity scale captures the “preoccupation with or awareness of an individual as a member of the family (and) thus, identifying family membership implies an awareness of who is in or out of the family” (p. 48). As such, Pasley (1987) and Pasley and Ihinger-Tallman (1989) claim that incongruence between spouses on family membership and structure is equal to boundary ambiguity. However, boundary ambiguity involves complex relationship processes as evident in the boundary ambiguity scales. Asking a respondent if they consider a member to be in or out of their family via one question as Pasley (1987, 1994) and Pasley and Ihinger-Tallman (1989) do is not synonymous with using a series of questions assessing the frequency at which a member is psychologically present in the respondent’s mind. Boss (2002, p. 97) states, “boundary ambiguity is not defined by household composition or biological membership… (but) concerns relationships and processes”. In Pasley’s (1987, 1994) and Pasley and Ihinger-Tallman’s (1989) measure, what is being assessed on the psychological dimension is to list the people whom they consider to be family members and two questions on the physical sub dimension assess who lives in the house and who lives outside of the house. Therefore, it is suggested here that what Pasley (1987, 1994) and Pasley and Ihinger-Tallman (1989) are measuring concerns consensus about family membership and structure, which is called agreement on family membership and agreement on family structure in the research study presented here. For the purpose of this study, the psychological dimension is relabelled
family membership (question #1) and the physical dimensions is relabelled family structure (question #2, 3). These variables are used to investigate Kaplan and Boss’ (1999) statement highlighted in this paper: family members should have an “overtly or covertly agreed-upon perception of who is in or out of the family” (p. 92). As such, this 3-item scale is used in this study not to measure boundary ambiguity but to measure consensus between family members on who is in or out of the family.

Family Functioning

Family functioning is selected as the dependent variable in this study, which is essentially “a study of how it maintains stability and deals with changes” (Rosenberg & Guttman, 2001, p. 84). Family functioning is a broad term used to assess how well the marriage or family is functioning. Examinations from systems theory suggest there are over fifty concepts related to family functioning with cohesion, adaptability, and communication as the three most central (Buehler, 1990; Sardin & Harrigan, 1995). The McMaster Family Assessment Device (Epstein, Baldwin & Bishop, 1983) has six dimensions: problem solving, communication, roles, affective response, affective involvement, and behavior control are all indicators of family functioning. Other examples include affective involvement, challenge, conflict, growth, family stress, family satisfaction, and a host of intra-personal variables. As such, many researchers studying any of these fifty concepts are contributing to knowledge on family functioning.

Divorce

In this study, boundary ambiguity, boundary consensus and agreement on family membership and structure, are tested on a sample of adult children and their parents in separated/divorced and nuclear families. The variable that measures whether parents of adult children are in their first marriages/ unions or if they have separated/divorced is called parent marital status. The divorce literature is reviewed below.
While in the first half of the 20th Century, widowhood was a greater cause of marital dissolution than was divorce, by the 1970's, the reverse was true (Larson et al., 2000). Divorce rates began to rise in Canada after the 1968 Divorce Act and an increasing number of women entering the labour force resulted in the feasibility of a larger number of individuals able to leave unhappy marriages than ever before. Of couples that married in 1991, it is estimated that 31% will divorce (Larson et al., 2000). According to a 1991 census, 3.7% of married adults were separated (Larson et al., 2000). The average duration of marriage in Canada is 14 years (Tully, Geran, & Mair, 2002). This means that a large portion of divorces occur when children are minors. In 2000 in British Columbia, 1,308 divorces, or 13% of all divorces in that year, occurred after 19 to 25 years of marriage (Tully, Geran, & Mair, 2002). Thus, a significant number of people experience the divorce of their parents when they are in their early adulthood years.

Divorce can be both positive and negative affecting one’s physical and mental health (Larson et al., 2000; Jaffe, 1997), with neutral and mixed consequences under-reported (Walczak & Burns, 1984). Gately and Schwebel’s (1991) literature review suggests that children of divorce, compared to children with parents who are together, favorably develop maturity, self-esteem, empathy and androgyny. Most children of divorce cope successfully, but there are some psychological consequences (Emery, 1994). Amato (2000) reports that research prior to and including the 1990’s finds divorced adults fair poorer than non-divorced adults on a host of factors such as decreased psychological and physical well-being and standard of living, increased social isolation, mortality and parenting difficulties. Studies also consistently find there is a small but significant effect size when children from divorced and nuclear families are compared on a host of factors.

Negative consequences of divorce extend into adulthood such as achieving less education, less money and assets, having poorer quality marriages and an increased risk of
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divorce (Amato, 1999). However, Amato's review suggests that the strength of these
correlations is modest. Other correlations not examined by Amato are that adult children are
reported to have lower levels of well being, look at marriage more ambiguously, are more
likely to cohabit and are more sexually active than are adult children of nuclear families
(Beal & Hochman, 1991). Middle age parents who divorce often turn to their adult children
for support rather than their aging parents (Aldous, 1996). However, when it comes to
giving help, parents can be less obliging. Divorced parents provide less physical help,
financial and emotional aid to their children compared to non-divorced parents due to
increased physical distance, less contact, and a lower quality relationship between parent
and child (Aldous, 1996; Jaffe, 1997). Women in mid-life who divorce have their share of
economic problems in part because they are extremely unlikely to remarry (Aldous, 1996).
The mother daughter relationship can become closer if they form an alliance against the
father but only until the daughter forms her own intimate relationship (Beal & Hochman,

Divorce can be devastating for children regardless of their age (Beal & Hochman,
1991), but a large concentration of research focuses on younger children. Male children of
divorce have more behavior problems than do their female counterparts (Larson et al., 2000;
Beal & Hochman, 1991). However, national longitudinal studies show that children who
have behavior problems after divorce often had these same problems before divorce (Aldous,
1996). Open conflict among spouses is associated with child's behavior problems both
before and after a divorce (Emery, 1994; Aldous, 1996). Children's well being post-divorce
is also related to the parent's psychological well-being and the relationship between the
custodial parent and the child (Brehm et al., 2002). Thus, it is the way parents deal with the
process of divorce, and not divorce itself, which determines children's ability to develop
intimacy as adults (Beal & Hochman, 1991). The quality of communication of the event of
divorce sets precedence for the sophistication of coping strategies adopted by children (Walczak & Burns, 1984). Poor communications at the time of a divorce and a poor relationship with the custodial parent are also associated with negative child outcomes.

While the family unit may not dissolve, it is transformed into a binuclear family unit. As a result, there are changes in the operationalization of family boundaries. According to Minuchin (1974), boundaries define the structure of family relationships. Redefining boundaries is an essential goal for families of divorce (Emery & Dillon, 1994). One spouse usually wants to separate more than does the other which complicates dissolving old boundaries and establishing new ones (Emery & Dillon, 1994). The change in family structure has the potential to influence the formation of new alliances (Maccoby, Mnookin, Depner & Peters, 1992). Some fathers feel like an outsider especially when another man, in essence, takes his place and is there to see, for example, a daughter dressing for her first date (Beal & Hochman, 1991). There are two contradictory theories in family mediation (Maccoby et al., 1992). First, that the old boundary with both parent and child as family members remains unchanged. Second, that a new boundary is formed with the residential parent and child without the non-residential parent. Here, boundaries become more permeable. Consider the case of the father living separately from the mother and children. The father is not part of the mother-child dyad, nor is he extended family (Maccoby et al., 1992, p. 34). For children and parents alike, reorganization post separation or divorce takes two to three years (Amato, 2000; Emery, 1994; Gray & Coleman, 1985).

Emery and Dillon (1994) state that scant research makes use of theoretical frameworks. Boundary ambiguity, boundary consensus, and agreement on family membership help to provide this framework. While there is some evidence that boundary ambiguity does not influence child adjustment in blended families (Buehler & Pasley, 2000), the little research with divorced families that exits suggests that boundary ambiguity is a
significant variable. Boundary ambiguity relating to divorce includes the “inability to redefine and reorganize family structure in a way that clearly removes the former partner from the spousal role” (Madden-Derdich, Leonard & Christopher, 1999, p. 590). Higher levels of boundary ambiguity arises due to an increase in emotional intensity for parents, an increase in financial strain for mothers, and a decrease in satisfaction with parenting performance for mothers (Madden-Derdich et al., 1999). The effect of boundary ambiguity on adult children of divorce does not appear to have been tested in the boundary ambiguity literature.

Boundary ambiguity in circumstances of divorce could be briefly illustrated using systems theory. In situations of divorce a parent may be physically absent from their child for a period of time as a result of respecting certain custody arrangements. At a given moment, the absent parent may be able to transcend the physical boundaries of the home where their child resides depending on the permeability of the boundaries. Boundaries may be non-permeable, semi-permeable or very permeable. “Boundaries are difficult to renegotiate following marital separation, however, because of uncertain normative expectations, intense and painful emotions, incompatible desires, limited contact and communication, and loyalty dilemmas” (Emery & Dillon, 1994, p. 374). The clarity of boundaries is often tested indirectly, such as the non-residential parent making a phone call to the child’s home late at night (Emery, 1994). According to Emery (1994), “partners who are also parents can never fully divorce” (p. 18). In a sense then, there may be ambiguity around who is “in” or “out” of the family. This ambiguity of boundaries is a major source of stress (Emery, 1994). As Weiss (1979), as cited in Brehm et al. (2002), suggested relationship between former spouses is ambivalent due to the contradictory emotions of anger and attachment.
The National Survey of Families and Households conducted in the United States suggests that three quarters of parents had a child aged 19-25 co-residing with them for at least sometime after age 19 (Aquilino, 1990). Scant research examines young adults who co-reside with their parents, with all studies reporting parent-child and parental strains (Aquilino & Supple, 1991). From the 1988 American National Survey of Families and Households, Aquilino and Supple (1991), contrarily, found many positive outcomes. However, parent-child conflict has the greatest impact on parent satisfaction. While frequency of conflict is an indicator for both parents, mothers report the greatest impact. This research suggests that a family situation of adult children co-residing with parents does not always function optimally. In a recent separation or divorce where an adult child continues to reside with one parent, the residential spouse has ideas about the way the boundaries should operate which may or may not match with their residential child’s or their former spouse’s ideas about boundaries. This research would like to focus on the way the adult child perceives family rules about boundary permeability (boundary consensus). Perceived consensus a child has with the rest of their family concerning the non-residential parent transcending the family boundary is unexplored in the divorce literature. The non-residential parent transcending the boundaries of the child’s home may not be uncommon considering that according to Ahrons (1994) in Brehm et al. (2002), 50% of former spouses who are parents have some form of contact with 12% being “perfect pals” and 38% being “cooperative colleagues”. In addition, the former spouse can be one source of support for the divorced, with women, for example, receiving help on practical house maintenance issues and financial advice (Serovich, Price, Chapman, & Wright, 1992).

The effect of family structure on divorce has been explored in the literature. In a study on structural boundaries of single parent families conducted in Israel that used the Kvebaek Family Sculpture Technique (KFST), Rosenberg and Guttman (2001) found that in
the majority of cases, there is congruence between a child’s and the residential mother’s perception of either including or excluding fathers in the family system boundaries. In a minority of cases (30%), perceptions are incongruent. North American literature suggests this figure is much higher. According to the majority of parents, an ex-spouse is no longer perceived to be a part of their family, but their children do perceive their non-residential parent as part of their family (Peterson & Zill, 1986). Among adolescents, 50% reported that non-residential fathers are members of their families in spite of low average levels of contact where as only 5% of divorced adults shared similar perceptions in a study by Furstenberg and Nord (1985). There is a possibility that incongruent perceptions can influence the parent-child dyad functioning.
CHAPTER III

HYPOTHESES

This chapter introduces and describes the hypotheses. A conceptual model follows (p. 29).

Hypothesis I

While Boss continues to suggest that families experiencing a wide range of stressful circumstances are experiencing boundary ambiguity, no comparisons have been made between the actual levels of boundary ambiguity these families are experiencing compared to families who are assumed not to be experiencing boundary ambiguity. This study will examine the influence of parents' marital status on boundary ambiguity. Parent marital status is a demographic measure that asks both the adult child and the parent to choose which answer best describes the parent’s marital status ranging from married, separated or divorced once, or two or more separation/divorces. The difference in levels of boundary ambiguity experienced by students whose parents have separated or divorced compared to students whose parents have not separated or divorced will be examined. It is hypothesized that parent marital status is positively related to boundary ambiguity. Students whose parents have separated or divorced are expected to have higher levels of boundary ambiguity than those whose parents are still together.

Hypothesis II

While the concept of boundary ambiguity is often referred to as a collective family experience, termed family boundary ambiguity (Caron et al., 1999; Garwick et al., 1994; Boss, 1999; Boss, 2002), very few studies have been conducted by Boss examining the correlation between boundary ambiguity and family outcome variables. In the research reviewed above, boundary ambiguity is primarily correlated to individual psychological variables such as depression (Boss et al., 1990a; Caron et al., 1999) and mastery (Boss et al.,
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1990a), with relatively few family variables measured. Examples of family variables related to family functioning that are significantly correlated to boundary ambiguity include developmental tasks, family rules and rituals, and family health and somatization. The relationship between stress and boundary ambiguity is moderated by developmental tasks, which are a set of expectations for the family to complete throughout its' life course (Boss, 1980b; Boss et al., 1988). Suggestions based on case studies have also related elevated levels of boundary ambiguity to inflexible family rules and rituals (Boss et al., 1988). Boss and colleagues (1987) found a significant relationship between boundary ambiguity and a variety of indicators of family health and somatization. However, no significant relationship was found between family stress and boundary ambiguity (Boss et al., 1987). A response rate of 29% may have attributed to a non-significant finding.

This study proposes to test a family outcome variable for which Boss has found a significant relationship. Boss' (1980a) study on families with fathers missing in action (MIA) is one such study. A significant relationship was found between the Psychological Father Presence Scale (PFP), which is the scale on which all of the BAS' are based, and certain sub scales of the Moos and Moos (1981) Family Environment Scale (FES) of family functioning (Boss, 1980a). Psychological father presence is how much a wife still carries out life as if her missing husband were psychologically present. The specific results of this finding while not published in Boss (1980a) are published in Boss, Greenberg, and Pearce-McCall (1990b). Psychological father presence was correlated to family functioning for: the achievement scale \( r = 0.35 \), the organization scale \( r = 0.34 \), the control scale \( r = 0.30 \) and the rigidity/flexibility scale \( r = 0.33 \) (Boss et al., 1990a, p. 7). It was concluded that psychological father presence indicates poor family functioning. Therefore, it is hypothesized that there is a negative relationship between boundary ambiguity and family functioning.
Students whose parents have separated or divorced are expected to have lower levels of family functioning than students whose parents are together.

**Hypothesis III**

The number of people residing in a family influences family dynamics (Aldous, 1996). Many changes occur when a family form changes as a result of separation or divorce, which may include the rules about the system boundaries and the member’s roles, or boundary consensus. Specifically, external boundaries need to be renegotiated between the spouse and the members who remain in the family household (Emery, 1994). When the family has remained in its nuclear form, unless the family is undergoing a developmental transition, boundary-related transitions will probably not be experienced. *Thus, it is hypothesised that parent marital status is negatively related to boundary consensus.* Students whose parents have separated or divorced are expected to have lower levels of boundary consensus than students whose parents are still together.

**Hypothesis IV**

The premise below is that optimal family functioning is a measure of harmony in the family and consensus contributes to family harmony. Boundary consensus incorporates role consensus. Burr and colleagues (1979) propose that consensus on relevant expectations, or role consensus, is positively related to satisfaction with a relationship. Satisfaction is an indicator of family functioning (Buehler, 1990), thus role consensus is indirectly linked to family functioning. It is suggested here that relevant expectations could also include expectations about a boundary’s adaptability, or more specifically, the entrance and exit of members into the family system.

Consensus about boundary permeability is the second major concept incorporated in boundary consensus. The major models of family functioning recognize that families need to maintain their external boundaries (Anderson & Sabatelli, 1999). In other words, the
operationalization of the family’s external boundaries is important for optimal family functioning. Recall that the boundary permeability literature centres on family cohesion or emotional connectedness among members (Whitechurch & Constantine, 1993). Both of these areas have a relationship to family functioning. It is not, therefore, a stretch to suggest that the study of consensus about boundary permeability could relate to family functioning.

In sum, it is proposed that ‘consensus on expectations’ as discussed by Burr and colleagues (1979), could include consensus about expectations for a role (role consensus) and expectations for boundary permeability, which together form boundary consensus. Therefore, it is hypothesized that there is a positive relationship between boundary consensus and family functioning. Higher levels of boundary consensus are expected to predict higher levels of family functioning.

**Hypothesis V**

The study of structural boundaries includes how the family draws its line between itself and the outside world and includes a delineation of who is and is not a member of the family. In Rosenberg and Guttmann’s (2001) controlled study of children of divorce and their mothers, agreement on family membership was measured as part of their study of structural boundaries. Peterson and Zill (1986) and Furstenberg and Nord (1985) conducted similar studies of family membership. Pasley (1987, 1994), and Pasley and Ihinger-Tallman (1989) applied boundary ambiguity, re-labelled family membership and structure for the purposes of this study, to remarriage. Results from these studies show that in circumstances of divorce or remarriage, there is less likely to be agreement about family membership and structure. It is hypothesized is that there is a negative relationship between parent marital status and family membership and structure. Students whose parents have separated or divorced are expected to have lower levels of agreement on family membership and structure than students whose parents are still together.
Hypothesis VI

Boss has left unclear the relationship between consensus and ambiguity. A number of issues could be measured around consensus in the family relating to boundary ambiguity such as consensus about family membership. Kaplan and Boss (1999) and Boss (2002) state the assumption that there needs to be some degree of actual consensus among family members on who is perceived to be physically and psychologically absent and present in order for the family to function well and without conflict. This assumption could be tested using family membership and structure. To the author's knowledge, this assumption has not been tested. In Garwick and colleagues (1994) qualitative study and in Boss’ books (Boss 1999; Boss, 2002) family meetings where members discuss each other’s perception of who is in and who is out of the family are noted. However, in no form is the family’s actual level of consensus regarding individual’s definition of who is in and who is out of the family measured in any of Boss’ quantitative studies. Pasley and Ihinger-Tallman’s (1980, unpublished) measure captures this under the heading of ‘boundary ambiguity’. As explained in the review of the literature section (p. 16), family membership refers to who is perceived to be psychologically present. Family structure refers to who is perceived to be physically present. As will be explained in the measures section, family membership and family structure are combined to form one variable labelled family membership and structure. From the work summarized above, it is hypothesized that there is a positive relationship between family membership and structure and family functioning. A higher level of agreement on family membership and structure is expected to predict a higher level of family functioning.
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Figure 1. The hypothesized relationships.
CHAPTER IV
METHODOLOGY

Sample Criteria

This study has two samples: students and their parents. There are three separate inclusion criteria for each of the two samples. Parents must have a child attending the University of British Columbia who is 19 years or older. Second, they must be able to fill out a paper-pencil survey that takes approximately 10 minutes to complete with no assistance from either their partner/spouse or their child (ren). Third, they cannot be widowed, as it is anticipated that a widow/er sample is not large enough to accurately analyze. Students must be a University of British Columbia student 19 years or older. Second, they must be able to fill out a paper-pencil survey that takes approximately 20 minutes to complete with no assistance from their parent(s). Third, they must be living with one or both parents.

Procedures

Participants were recruited from undergraduate classes at the University of British Columbia. The faculty members from Arts, Fine Arts, Science, and Applied Science were contacted to obtain permission to distribute the surveys. The co-investigator Danielle Desfossés visited the classrooms for which permission was given. The surveys were distributed at the beginning of class accompanied by verbal instructions including the inclusion criteria for each sample. Students who volunteered to participate took a survey. In addition, the co-investigator asked students residing with one or both parents to take a survey to offer to one of their parents. The completed surveys were collected over one or more class periods. Student surveys were enclosed in a self-addressed campus mail envelope so that students could hand their completed survey to any department secretary. Parent surveys were enclosed in a self-addressed stamped envelope for regular mail. As the target populations
were adult children of separation or divorce residing at home and their residential parent, 
quota sampling was used to obtain a sample size large enough to analyze the study’s 
hypotheses using multiple regression. The minimum target population was 30 students who 
identify themselves as children whose parents have ever separated or divorced. Surveys 
were collected until this target was reached.

**Measures**

**Dependent variable: Family Functioning**

The McMaster Family Assessment Device, or FAD (page 2 of parent scale; page 4 of 
adult-child questionnaire) is an individual measure of whole-family functioning, which was 
initially developed in the 1950’s at McGill and McMaster Universities in Canada and revised 
over a period of 25 years (Epstein, Bishop & Baldwin, 1982). FAD is largely based on 
systems theory (Epstein, Bishop & Levin, 1978). Version 3 of the scale is commonly used, 
which is a 60-item questionnaire with six subscales measuring six dimensions of family 
functioning. The problem-solving dimension measures a family's instrumental and affective 
response to the various steps of problem solving. The family’s communication style is 
examined for effectiveness and extent with optimal communication as the transmission of 
clear and direct verbal messages. Roles are assessed as patterned behaviors that fulfill the 
instrumental and affective needs of the family. Affective responsiveness assesses the 
appropriateness of responses to stimuli on the quantity and quality of feelings by family 
members while affective involvement examines the amount of concern, care, and interest 
expressed by family members for each other. Last, behavior control assesses the standards of 
behavior and discipline maintained in the family (Epstein, Baldwin & Bishop, 1983). A 
seventh subscale of general functioning measures the overall health/pathology of the family 
and is the basis for predictive validity of the scale (Sawin & Harrigan, 1995). Test-retest 
reliability has shown a moderate correlation ranging from 0.66 - 0.76, however long-term
reliability has not been established (Hauser, 1989; Sawin & Harrigan, 1995). The internal consistency of the 7 subscales ranges from 0.72 to 0.92 (Miller, Epstein, Bishop & Keitner, 1985). Concurrent and discriminate validity have also been established (Miller et al., 1985) with some degree of predictive validity reported (Touliatos, Perlmutter & Straus, 1990).

A modified version of the scale taken from the National Longitudinal Study on Children and Youth (NLSCY) is used in this study. All of the items are taken from the general functioning subscale. Sample items include: "Planning family activities is difficult because we misunderstand each other (question #1), and "We cannot talk to each other about the sadness we feel” (question #3). A factor analysis was performed for the NLSCY with a sample size of 13,190 families. Cronbach alpha coefficient is 0.87. The first question “we misunderstand each other” has the lowest correlation of 0.51, and the last question “we confide in each other” has the highest correlation of 0.66.

The scale is measured on a four point scale from strongly agree to strongly disagree and is coded from 1 to 4. Odd items are reverse coded. In addition, the entire scale is reverse coded so that a low score reflects low family functioning and a high score reflects high family functioning. The scale is divided by the total number of items (12) to produce a minimum score of 0, indicating low family functioning, and a maximum score of 4.00, indicating high family functioning.

Independent Variable: Parent Marital Status

Literature on separation and divorce abounds. In this study, parent marital status is hypothesised to have a direct main effect on the independent variables boundary ambiguity, boundary consensus and family membership and structure. To assess parents’ marital status, a demographic measure is commonly used. A single item asks student respondents if in their immediate family, there has been either a separation or divorce (coded 0), 1 separation or divorce (coded 1), or 2 or more separations or divorces (coded 2). Student respondents who
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answered 2 or more separations or divorces are screened out of this analysis, as there are not
enough respondents in this category to perform regression analyses. Thus, the minimum
score is 0 and the maximum score is 1. A majority of student respondents had one of their
parents return a survey that also assessed their respective parents’ marital status to verify the
accuracy of the students’ information.

**Independent variable: Boundary Ambiguity**

The Psychological Presence Scale is the original basis for the Boundary Ambiguity
Scales (BAS) which measures boundary ambiguity experienced by: MIA wives (BAS-1);
widows (BAS-2); adolescent home leaving (BAS-3); adolescents and adult children of
divorce (BAS-4); divorced adults (BAS-5); and caregiver’s of patients with dementia (BAS-
6) (Boss et al., 1990b). The scales have been administered to one family member only to
examine levels of boundary ambiguity in the family with the exception of the BAS-3, which
was administered to both husbands and wives from the same families but the scores were not
combined.

There is some evidence supporting the reliability for the boundary ambiguity scales.
The Cronbach’s alpha for the BAS-2 is the lowest at 0.58 according to an unpublished study
by Friday (1985) as cited in Boss and colleagues (1990b), with reliability for BAS-5 not
reported. The BAS-3, 4 and 6 have Cronbach alphas of 0.74 (Boss et al., 1990), 0.75 (Boss
et al., 1990), and 0.79 (Kaplan & Boss, 1999), respectively. As for factor analysis, according
to Berry (1990) who examined Greenberg and Boss’ (1988) unpublished NCFR pre-
conference paper, 2 factors emerged on the BAS-3; labelled affective and cognitive
preoccupation. Similarly, for the BAS-6, 2 factors emerged, labelled immobilization and
close-out (Kaplan & Boss, 1999). Evidence for construct validity on a variety of topics is
reported (Blackburn et al., 1987; Boss, 1977; Boss, 1980; Boss et al., 1987), including on the
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BAS-5, which was judged by a panel of 12 experts to have content validity (Boss et al., 1990b).

This study uses the boundary ambiguity scale for adult children of divorce. Sample items include: “I hope that my parents' relationship with each other will improve” (question #1), “I worry about whether I am spending enough time with each of my parents (question #2), and “I think about my mother and my father as a unit, as “my parents” “(question #10) “

The development of a scale for families not experiencing a specific loss would increase the utility of the scale (Berry, 1990). The BAS-4 for adult children of divorce (adult child scale page 2, 3) was slightly modified so that persons that are theoretically expected to be experiencing higher levels of boundary ambiguity can be compared to persons not expected to be experiencing boundary ambiguity. Boundary ambiguity is measured for both adult children of nuclear families and adult children of a separation or divorce. The scale measures “the degree to which structural reorganization and family redefinition remains uncertain after divorce” (Madden-Derdich, Leonard & Christopher, 1999, p. 593). Items numbered 6, 7, 8, 9, 19, and 20 of the original scale were modified. Item numbers 6 and 7 were modified by deleting the words “since the divorce” so that the sentence starts with “I find it difficult” and the word ‘more’ was deleted between the words ‘it’ and ‘difficult’. Item number 8 on the original scale reads: “My feelings about whom I consider a member of my family and who is not a member of my family continues to change.” This unclear sentence structure was changed to “There are times when who I would define as a family member changes”. Item 9 reads: “I still feel disturbed about my parents’ divorce” and was changed to “My parents’ relationship disturbs me.” The word ‘both’ in item 19 was deleted so that the question now reads, "I feel comfortable in my parent(s)’ home (s), like I belong.” Last, item 20 of the original scale reads: “It is unclear how the relationships between my extended
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family will be affected by the divorce.” It now reads, “I feel that the relationship between my parents will negatively affect my relationships with my extended family.”

The boundary ambiguity scales are all measured on a five-point scale: never, rarely, sometimes, often, and almost always. The BAS-4 for adult children has 25 items, with 20 items originally designed for adult children of divorce and 5 items designed for adult children who have one or more parents in a dating or remarriage relationship. Since this study did not collect enough data from the later group, only the first 20 items are included for analysis. Certain numbers are reverse coded according to the scale’s directions (#3, 11, 12, 13, 19). The scale’s directions also indicate that question #10 should be reverse coded. This question reads: “I think about my mother and father as a unit, as my parents”. This question is not reverse coded for the responses from adult children of nuclear families, as a low score on this question would indicate high boundary ambiguity. The scale is divided by the total number of items (20) to produce a minimum score of 0, indicating low boundary ambiguity, and a maximum score of 5.00, indicating high boundary ambiguity.

Independent variable: Boundary Consensus

A single 10-item scale measures boundary consensus (page 3, 4 of child questionnaire). This scale was created by the author. The scale measures perceived agreement and is thus an individual measure. There are two versions of the scale. The first version is for students living with a separated or divorced residential parent. Students must have had a visit from their non-residential parent in their home in the last year. The second is intended for students in any other living arrangement so that if sample sizes permit, a comparison can be made between the two groups. The structure of both versions is identical but the wording was adapted to suit the specific target groups. Sample items for the scale for students whose parents have separated or divorced are given. “How frequently do you have disagreements with your family about information related to family interactions that you can
disclose to your (non-residential) parent(s)” (question #1), and "How frequently do you have disagreements with your family about this the frequency at which your non-residential parent enters your home” (question #6).

Questions 1 to 8 of the scale are based on the theoretical foundations of boundary maintenance from Kantor and Lehr (1975), which was modified to examine consensus about boundaries. Kantor and Lehr (1975) address ways families establish, maintain, and regulate boundaries. The family boundary process is framed through two dimensions: access and target. The scales only make use of the access dimension. The target dimension is excluded because it measures affect (cohesion), power (feelings of restraint on doing, feeling, and thinking) and meaning (communication of ideas about sameness and difference) which all apply to emotional rather than external boundary processes. The particular sub dimensions of the access dimension were selected based on which concepts could feasibly be adapted in a questionnaire on consensus about boundary permeability. The access dimension measures the way a family regulates its internal and external space, time (clock & calendar) and energy (within and outside the family). Space and time are used in the scale. Thus, boundary consensus is the phenomenon of an individual’s perceived agreement with other family members on the family’s spatial and temporal territory.

Regulating space refers to the maintenance of territory and distance in system and subsystem boundaries. Three family mechanisms used to regulate space are bounding, linking, and centering. Questions 1 to 3 summarize a particular sub dimension of the bounding process, the energy devoted to boundary maintenance, called screening. Screening is the filtering of incoming and outgoing information and energy. A second sub dimension of space, linking, is the regulation of distance between members through bridging, buffering, blocking out, channelling, and recognizing. Only channelling was selected and it describes pushing someone towards a specific direction or destination (question 4). A third sub
dimension of space is called centering. Centering provides the guidelines for the flow of information and energy into and out of a system. It is comprised of locating, gathering, designing, arranging, and spreading. Only designing is used (question 5) which describes the general way that the family desires to live. The second access dimension is time. Mechanisms families used to regulate time are orienting, clocking, and synchronizing, but only clocking is used in the scales. Clocking is the daily cycles of time tracked though sequencing, frequency setting, duration setting, pacing, and scheduling. The scales utilize frequency, duration, and scheduling. Frequency (question 6) describes how often events are repeated, duration describes how long events last (question 7) and scheduling is the process which regulates frequency and duration (question 8).

The last two items of the boundary consensus scale incorporates role consensus with the idea of external boundary maintenance described above. Recall that role consensus describes consensus among actors for the expectations of the given role (Burr et al. have, 1979). Question 9 and 10 assess an individual’s consensus about general roles such as chores, tasks, and duties that members are to perform when a family member is absent and present.

The scale is measured on a five-point likert scale: never, once in a while, sometimes, frequently, and almost always. All items on the scale are reverse coded and the total score is produced by summing all items and divided by the total number of items (10) to produce a minimum score of 0, indicating low boundary consensus, and a maximum score of 5.00, indicating high boundary consensus.
Independent variable: Family Membership and Structure

Pasley and Ihinger-Tallman’s original (1980, unpublished) measure is used to assess the variables labelled herein as family membership and structure. Recall Pasley and Ihinger-Tallman (1980) originally studied this variable but under the label boundary ambiguity. These dyadic measures are distributed to two persons of the same household to measure actual consensus. These scales are identical for both children of divorce (page 5 on child survey) and their parents (page 2, 3 of parent survey). The measures are open-ended. Recall that Pasley and Ihinger-Tallman’s original (1980, unpublished) measure is designed to have the same dimensions as Boss’ boundary ambiguity measure. Both measures are divided into two dimensions: physical and psychological. The psychological dimension of Pasley and Ihinger-Tallman’s version of boundary ambiguity, relabelled family membership, is assessed by the question “Please tell us who are the people you consider to be your family members. List them, their age and sex, beginning with yourself” (Pasley, 1994, p. 151). The physical dimension of Pasley and Ihinger-Tallman’s version of boundary ambiguity, relabelled family structure, asks the respondent about themselves and the other members of their present family. This is assessed by two questions: first, “Please tell us who lives with you in your home at this time. List them, their age and sex” (Pasley, 1994, p. 151); and second, “Please tell us who does not live with you in your home at this time. List them, their age and sex.” Pasley (1994) suggests that to increase accuracy, respondents are prompted by asking: “who? (husband, wife, son, stepson, etc.).” One addition for both questions was made to the scale by the author; a heading asks the respondent for their family members’ gender and ages, as well as their relationship to the respondent.

Family membership and structure are measures that assess agreement between two members of the same household. In the original scale’s coding, each pair (parent and child) is given a score of either low or high on each of the dimensions. Different coding is used in
this study based on patterns that emerged in the data. For agreement on family membership the coding is as follows: disagreement between parent and child (coded 1), parents of nuclear families did not include their spouse as a family member but the child did (coded 2), perfect agreement between parent and child (coded 3). The coding is identical for agreement on family structure. It was observed that quite often, the disagreements (coded 3) that occurred between parent and child were in cases of a separation or divorce; the child listed the parent as a family member but the parent did not. There was a high correlation between family membership and family structure in this study ($r = 0.829, p < 0.01$), indicating that it is feasible to combine the two variables. Each pair’s score on family membership was added to their score on family structure. The variable is referred to as family membership and structure in this study.

It is important to clarify here an error that went undetected in the printing process for the parent version of the survey. In the paragraph above it was noted that cases where parents of nuclear families did not include their spouse as a family member but the child did were coded as 2. On the dimension of family membership only (and not family structure) the question asks about biological family members, but the identical question on the student survey does not include the term biological. The wording in the parents’ instructions above this question, however, gives one’s spouse as an example of a family member the respondent could choose to include on the open-ended question about family membership. Only 9.8% of the parents who answered this question chose to include biological family members such as their parents or siblings, where as their child did not list those people. In other circumstances, this would be coded as the disagreements. A decision was made to code those people separately as “2”, which falls between disagreement (coded 1) and perfect agreement (coded 3). The rational for this coding is that the coding was meant to be as
accurate as possible, and that coding this category of people as perfect agreement or disagreement did not seem appropriate.

Psychometric properties for Pasley and Ihinger-Tallman’s original coding of their scale are not available. Inter-rater reliability was assessed by having a researcher code the items based on the coding scheme described above. Inter-rater reliability for family membership and structure using Cohen’s Kappa is 1.00.

Control Variables

The control variables were selected to test for spuriousness. The control variables assessed from the student population are gender, income, and age. The control variables assessed from the parent population is parents’ gender, age, education, and income. The control variables will be used in any given regression equation when they have a significant bivariate correlation with the dependent variable.

Students’ Gender

The first question of the students’ survey asks respondents to identify as female (coded 1) or male (coded 2).

Parents’ Gender

The first question of the parents' survey asks respondents to identify as female (coded 1) or male (coded 2).

Parents’ Age

Possible responses for age as a control variables are: 35 years or younger (coded 1), 36 to 45 years (coded 2), 46 to 55 years (coded 3), 56 to 60 years (coded 4), 61 to 64 years (coded 5), 65 years or older (coded 6).
Parents’ Education

Education is routinely used as a control variable. The respondents are asked to select the highest level of education they have obtained from 8 possible categories. The responses are: no schooling (coded 1), elementary (coded 2), high school (coded 3), some college/university (coded 4), college diploma (coded 5), B.A./B.Sc (coded 6), Masters or postgraduate degree (coded 7), medicine or doctoral degree (coded 8).

Parents’ Income

Income is widely used as a control variable in studies of divorce. This demographic variable asks respondents to select one of 11 possible household income brackets. Alternatively, they can respond that they do not know their income. The income bracket starts at less than $10,000 and increases to $140,000 or more. The coding is as follows: less than $10,000 (coded 1), $10,000-$14,999 (coded 2), $15,000-$19,999 (coded 3), $20,000-$29,999 (coded 4), $30,000-$39,999 (coded 5), $40,000-$49,999 (coded 6), $50,000-$59,999 (coded 7), $60,000-$79,999 (coded 8), $80,000-$99,999 (coded 9), $100,000-$139,999 (coded 10), $140,000 or more (coded 11). Respondents could also report that they did not know their household annual income (coded 12).

Data Analysis

Univariate

First, the assumption of independence must be examined by running a correlation matrix and descriptive statistics. For each independent and dependent variable, the assumption of normality, which is that variables are normally distributed, is examined by checking for skewness and kurtosis. Then, the correlation between each of the independent variables, in addition to the variable gender, and the dependent variable is tested. Cronbach’s alpha is used to determine the internal reliability of the family functioning, boundary ambiguity, boundary consensus, and family membership and structure scales. The
family functioning and boundary ambiguity scales have been judged to have some form of validity. Psychometric properties for the agreement on family membership and structure scale, elsewhere called boundary ambiguity, are not available. Psychometric properties on the boundary consensus scale have not been performed as this scale was created by the author for this study. Face validity is assessed by administering the boundary consensus scale to five graduate students in the department of Family Studies at the University of British Columbia. Readers were given the definitions and sample items for both boundary consensus and boundary ambiguity and asked to match each item with a concept. The readers have some trouble distinguishing between boundary consensus and boundary ambiguity. Results suggest there may be some overlap between the two concepts. Once data has been collected, factor analyses and bivariate correlation matrices will be performed to examine the distinction between these two scales.

Yoked Data

There is a concern in research that collects data from related respondents, such as parents and their children, because the assumption of independence necessary for multivariate statistical procedures is violated. This is referred to as yoked data. Gonzalez and Griffin (1997) outline four concerns: first, the assumed independent error where researchers correlate interdependent data as if it were independent; second, the deletion error where researchers throw out half of the sample; third, cross-level error where researchers add the two scores, and fourth, levels of analysis error, which describes the influence each score has on the other. All of the problems except for the last are definitely not of concern to this study.

The level of analysis error describes the problem where the individual level scores contain dyadic level influence and scores at the dyadic level contain individual level influence. For example, if a husband is dissatisfied, chances are his dissatisfaction will
influence his wife’s level of satisfaction, and visa versa. Thus, researchers cannot look at the wife’s score as an individual score alone. In addition, if the husband and wife’s scores are combined to create a dyadic score, the two scores will not be independent of each other but will overlap with each person influencing the other. Gonzalez and Griffin (1997) argue that the researcher needs to subtract the interdependent influence that each dyadic score has on the other. In this study, there are two scales, agreement on family membership and agreement on family structure, which compute dyadic scores. Both scales are administered to the parent and child and they are asked to report on their perception of family membership and structure to see if the two respondents agree or disagree. One member of the dyad may define more people to be in their family or to live with them than does the other. Cohen’s Kappa will be used to compute the reliability between parent and child when measuring agreement (Norusis, 2000). Since the parent and child agreement scores are not completely independent, Kappa factors out the probability that the parent and child scores could have occurred by chance.

Typically, Kappa is a statistic used to assess inter-rater reliability when observing or coding qualitative or categorical variables. For example, two raters could independently observe four birds and decide whether they belong to the ‘red’, ‘orange’, or ‘yellow’ species. Kappa would calculate the extent to which inter-rater reliability is satisfactory and determine where raters disagree (e.g. do they have trouble distinguishing between the ‘orange’ and ‘red’ species). Kappa will be used assuming that agreement between parent and child can be measured in the same way intercoder reliability is measured (Bulcroft & White, 1997).

Different Levels of Analysis

The problem of having contrary levels of analysis, units of observation, and units of analysis is not uncommon to family studies research (Bulcroft & White, 1997). These terms will be defined. The level of analysis is the level on which the theory is measured. Units of
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Analysis are the individual, dyadic, or group sampling. The unit of observation describes the person(s) who fills out the survey. Problems can occur, if, for example, the unit of analysis differs from the unit of observation.

The independent variables boundary ambiguity and boundary consensus and the dependent variable family functioning ask one respondent to be a reporter on the family. The unit of analysis is the family but the unit of observation is the individual. Asking the respondent to assess clarity or consensus about boundaries, for example, may stretch his/her capabilities (Bulcroft & White, 1997). However, Bulcroft and White (1997) suggest that once the concept being measured has been clearly defined, the scale for the concept should ask the reporter to assess the frequency of these behaviors. The boundary consensus scale does just that by asking respondents to report on the frequency of disagreement with the family on a select number of indicators related to boundary permeability and roles. The boundary ambiguity scale asks respondents how frequently they have feelings about boundary ambiguity on a scale from never to almost always. The family functioning scale asks respondent how much they agree with statements, which is used as an indicator of frequency. For example, a response of strongly agree to the item "we cannot talk to each other about the sadness we feel" would indicate that the respondent perceives the family to talk rarely to each other about their sadness.

With the independent variable agreement on family membership and structure, the unit of analysis is the dyad but the unit of observation is the individual. Two related individuals fill out the survey and the inter-rater reliability between the scores is computed to arrive at a dyadic measure. Computing the difference between the scores is an acceptable way to deal with this problem (Bulcroft & White, 1997, p. 147).
Sample Description

The sample for this study is undergraduate students in Arts, Fine Arts, Science, and Applied Science classes at the University of British Columbia. Professors from various faculties were contacted to obtain permission to recruit voluntary participants from their classrooms. All professors contacted granted permission to recruit participants. Of 481 surveys distributed to students, 193 student surveys were returned, for a response rate of 40.12%. However, 16 of the surveys were incomplete, 4 were living in a step-family, 4 indicated there had been two or more separations or divorces in the family, 2 were living in an astronaut family (families in which one of the spouses works and lives abroad), 3 were adopted, and in 4 cases the student had experienced the death of a parent. The resulting sample for analyses consisted of 160 students. Table 1 represents the distribution of sample members by class and faculty in which surveys were distributed.

Of the total 160 student respondents included in the final analysis, 134 are women (83.80%) and the remaining 26 are men (16.20%). A large number of women in this sample may be due to the large proportion of classes sampled from the Faculty of Arts. However, research on mail surveys finds males are more likely to be nonresponders because they are less cooperative as a group than females (Mangione, 1995). Respondents from the Faculties of Science and Applied Science were less likely to return surveys (22.05%) than respondents from the Faculties of Arts and Fine Arts (47.74%). Therefore a larger proportion of surveys were distributed in the Faculty of Arts in order to maintain a reputable response rate. In both faculties women were more likely than men to return surveys.
### Table 1. Distribution of Sample Members by Class/Faculty

<table>
<thead>
<tr>
<th>Faculty/Class</th>
<th>Distributed</th>
<th>Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Fine Arts</td>
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<td></td>
</tr>
<tr>
<td>Anthropology 100</td>
<td>16</td>
<td>7</td>
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<td>4</td>
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<td>8</td>
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<tr>
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<td>6</td>
</tr>
<tr>
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<td>9</td>
</tr>
<tr>
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</tr>
<tr>
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<td>2</td>
</tr>
<tr>
<td>Geography 100</td>
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<td>8</td>
</tr>
<tr>
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<td>11</td>
</tr>
<tr>
<td>Social Work 305</td>
<td>9</td>
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</tr>
<tr>
<td>Social Work 400</td>
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<td>Women’s Studies 224</td>
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<tr>
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<td>Sciences &amp; Applied Science</td>
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<tr>
<td>Biology 111</td>
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</tr>
<tr>
<td>Totals</td>
<td>481</td>
<td>197</td>
</tr>
</tbody>
</table>

Age is assessed by the following categories: 19-21 years, 22-25 years, 26-35 years, 36-45 years, 46-55 years, 56-64 years, 65 years or older. The average categorical response is 19-21 years with the youngest respondent being 19 years and the oldest respondent in the category of 26-35 years. In order to participate in the study respondents needed to be living
at home with one or both parents so it is not surprising that there were no respondents in the older age categories.

Three demographic variables measured from the student sample are education, income, and marital status. Since the sample was recruited from university classrooms, all students have at least some university education. Possible responses for education are: some university, Bachelor’s degree, Masters or postgraduate degree, and MD/PhD. The average response is some university (89.40%) with 2.5% of respondents reporting they have a Bachelor’s degree and 1.9% of respondent reporting they have a Masters or postgraduate degree. Students were asked to indicate their annual incomes as being within the range of less than $10,000 to $140,000 or more. Respondents could also report that they did not know their income. In the sample, 89.40% of respondents reported to have income of $19,999 or below, and 3.80% of respondents have an income of between $20,000 and $59,000. The remaining 6.90% of the sample indicated an unknown income. The average response is between $10,000 and $14,999. Marital status is almost a constant. Possible responses for student marital status are: single, cohabiting, common law, married, remarried, separated, divorced or widowed. The total percent of single respondents is 98.10% with the remaining of 1.90% of respondents indicating they are married.

A separate survey was prepared for parents (see Appendix B). Students were asked to offer a survey to one of their parents. Of 193 students who returned their surveys, 122 corresponding parent surveys were returned for a response rate of 63.21%. In 3 additional cases only, a parent returned a survey but their child did not. Furthermore, 2 of the parent surveys were incomplete, 9 of the corresponding student surveys were incomplete, 3 were living in a step-family, 2 indicated there had been two or more separations or divorces in the family, 4 were living in an astronaut family, in 1 case the student was adopted, and in 3 cases the parent was a widow/widower.
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Data collected for the parent sample comes from the parent surveys. Four demographic variables measured for parents are gender, age, education, and income. The parent sample consists of 77.6% females and 22.4% male. Parent’s age was assessed by the following categories: 35 years or under, 36-45 years, 46-54 years, 55-60 years, 61-64 years, and 65 years or older. The average categorical response is 46-54 years, with the youngest respondent in the category 36-45 years and the oldest respondent in the category of 61-65 years.

Parents’ education is assessed by the following categories: no schooling, elementary, high school, some college/university, college diploma, B.A./B.Sc., Masters or postgraduate degree, MD/PhD. The average categorical response is “college diploma”, with 1.02% of respondents indicating they have elementary school, and 1.02% of respondents indicating they have an MD/PhD.

The last demographic variable important to this study from the parents’ database is parental income. Parents were asked to indicate their annual incomes as being within the range of less than $10,000 to $140,000 or more. Respondents could also report that they did not know their income. In the sample, 17.53% of respondents have an income of $29,999 or below, 13.40% of respondents have an income of between $30,000 and $49,999, 17.53% of respondents have an income of between $50,000 and $79,999, and 37.11% of respondents have an income of between $80,000 and $139,999, and 10.31% of respondents have an income of $140,000 or greater. The remaining 4.12% of the sample indicated an unknown income. The average response is between $60,000 and $79,999.

Data collection began on September 24, 2003 and ended on March 17, 2004. It is possible, though improbable, that cohort and period effects affected the study. Data were collected throughout one academic year and there were no significant Canadian political or
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social events that would impact a survey about family life, living at home or separation and divorce.

Univariate Description of the Main Variables

Dependent Variable: Family Functioning.

The dependent variable family functioning was measured using the National Longitudinal Study on Children and Youth (NLSCY) version of the McMaster Family Functioning Scale. The scale was measured by a summative index of 12 items measured on a 4-point likert scale. As stated in the measures section, the odd numbers in the scale were reverse coded as indicated in the NLSCY scale’s instructions, and then all items were reverse coded so that a low score indicates low family functioning and a high score indicates high family functioning. The scale was used on both student and parent respondents. In the student population, there are 160 valid cases with none missing using the listwise method. The internal consistency of the scale as measured by Cronbach alpha coefficient is 0.9027. Scores were standardized and range from 1.25 to 4.00 producing a range of 2.75. The mean, median and mode are 2.9609, 3.0, and 3.2500 respectively, with a standard deviation of 0.5820. Skewness is -0.4740 with a standard error of 0.1920, indicating no significant skewness. Kurtosis is -0.2480 with a standard error of 0.3810, indicating no significant kurtotic distribution.

In the parent population, there are 98 valid cases out of a total of 122 parent surveys returned. Above various reasons for excluding the remaining 24 parents surveys was noted. Parent family functioning scores were entered into the students’ database that contains a sample of 160 students, therefore 68 cases of parents’ family functioning are missing using the listwise method. The internal consistency of the scale as measured by Cronbach alpha coefficient is 0.8816. Scores were standardized and range from 1.75 to 4.00 producing a range of 2.25. The mean, median and mode are 3.2593, 3.25, and 3.25 respectively, with a
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standard deviation of 0.4529. Skewness is -0.5970 with a standard error of 0.2440, indicating no significant skewness. Kurtosis is 0.5370 with a standard error of 0.4830, indicating no significant kurtotic distribution.

There is a difference between students’ and parents’ univariate statistics on the family functioning scale. The parents’ mean level of family functioning is slightly higher, indicating a higher level of perceived family functioning. The parents’ scores are more negatively skewed and more peaked than the students’.

Independent Variables

Parent Marital Status.

Parent marital status was measured using a single item by asking student respondents if in their immediate family they had experienced 0 separation/divorce (code=0), 1 separation/divorce (code=1), or 2 or more separations/divorces (code=2). Cases in which there had been 2 or more separation/divorces were excluded from this analysis because it is probable that these cases are conceptually different from cases with 1 separation/divorce. There are 160 valid cases with none missing using the listwise method. The minimum score is 0 and the maximum is 1.00 producing a range of 1.00. The mean, median and mode are 0.190, 0, and 0 respectively, with a standard deviation of 0.39. Of 160 cases, 130 (81.30%) have neither a divorce nor separation in their immediate family and 30 cases (18.80%) have one experience of a separation or divorce.

Boundary Ambiguity

Boundary ambiguity was measured by a summative index of 20 items measured on a 5-point likert scale. While the scale originally has 25 items, only the first 20 items of the scale are used as the remaining 5 items concern blended families. Low total scores indicate low boundary ambiguity and high total scores indicate high boundary ambiguity. There are 160 valid cases with none missing. The internal consistency of the scale as measured by
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Cronbach alpha coefficient is 0.8760. The minimum score is 1.05 and the maximum is 4.15 producing a range of 3.10. The mean, median and mode are 2.0122, 1.90, and 1.90 respectively, with a standard deviation of 0.5660. Skewness is at 0.833 with a standard error of 0.192. Kurtosis was at 0.555 with a standard error of 0.381, indicating no significant kurtotic distribution. The skewness to standard error ratio is 4.3385, which is greater than preferred but judged not to be problematic for later regression analyses because the skew is relatively small and the constraints on normality are more significant with dependent variables.

**Boundary Consensus.**

Boundary consensus was measured by a summative index of 10 items measured on a 5-point likert scale. The scale was reverse coded, with low total scores indicating low boundary consensus and high total scores indicating high boundary consensus. There are 146 valid cases with 14 missing using the listwise method. Chronbach’s alpha for the scale is 0.8229. The minimum score is 2.30 and the maximum is 5.00 producing a range of 2.70. The mean, median and mode are 4.3863, 4.500, and 4.400 respectively, with a standard deviation of 0.5198. Skewness is at 1.486 with a standard error of 0.201. Kurtosis is at 2.775 with a standard error of 0.399. The skewness to standard error ratio is 7.3930, which significantly skewed. The kurtosis to standard error ratio is 6.9549, which is judged to be significantly kurtotic. The lack of variation is not viewed as problematic since it simply makes the null hypothesis more likely.

**Family Membership and Structure**

Family membership and structure comprise the physical and psychological dimensions of Pasley and Ihinger-Tallman’s (1980, unpublished) version of boundary ambiguity. Family membership is a single item that asks both student and parent respondents to list the people they consider to be their family members. Family structure is
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composed of two items that ask both student and parent respondents to list the people in their family that they live with and those they do not live with. The two variables have been combined due to a high correlation, and called family membership and structure. There were 92 valid cases with 68 missing using the listwise method. The internal consistency of the scale as measured by Cronbach alpha coefficient is 0.9232. The minimum score is 2 and the maximum is 6 producing a range of 4. The mean, median and mode are 4.96, 6.00, and 6.00 respectively, with a standard deviation of 1.60. Skewness is -1.073 with a standard error of 0.251. Kurtosis is -0.593 with a standard error of 0.498. The skewness to standard error ratio is 4.2749, which is significantly skewed. The kurtosis to standard error ratio is 1.1908, which is not judged to be significantly kurtotic. The lack of variation with regards to the spread of the distribution is not viewed as problematic since it simply makes the null hypothesis more likely.

Table 2. Descriptive Statistics of the Mean and Standard Deviations of the Main Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>X</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Marital Status</td>
<td>0.19</td>
<td>0.39</td>
<td>160</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td>2.01</td>
<td>0.57</td>
<td>160</td>
</tr>
<tr>
<td>Boundary Consensus</td>
<td>4.39</td>
<td>0.52</td>
<td>146</td>
</tr>
<tr>
<td>Family Membership &amp; Structure</td>
<td>4.96</td>
<td>1.60</td>
<td>92</td>
</tr>
<tr>
<td>Students’ Family Functioning</td>
<td>2.96</td>
<td>0.58</td>
<td>160</td>
</tr>
<tr>
<td>Parents’ Family Functioning</td>
<td>3.26</td>
<td>0.45</td>
<td>98</td>
</tr>
</tbody>
</table>

Table 3 shows the bivariate correlations between the student and parent control variables, the independent variables, and the dependent variable. The control variables will only be entered into any given regression equation when they are significant with the dependent variable of that regression equation.
Hypothesis Testing

Hypothesis 1

Hypothesis I states that parent marital status is positively related to boundary ambiguity. This hypothesis is supported such that students in nuclear families from lower levels of boundary ambiguity. Table 3 shows the bivariate correlations. Of all the control variables assessed, only students’ age and parents’ income have significant bivariate correlations with boundary ambiguity. A three-model regression analysis is used to test the hypothesis (Table 4), with boundary ambiguity as the dependent variable. In Model 1, the independent variable is parent marital status and the dependent variable is boundary ambiguity. Beta for Model 1 is 0.430, significant at $p \leq 0.001$. R squared for Model 1 is 0.185 with a SE of the estimate at 0.4592. In Model 2, the independent variable parent marital status was entered, along with boundary consensus and family membership and structure. Beta for Model 2 is 0.468, significant at $p \leq 0.01$. Boundary consensus has a significant effect in this model with a Beta of -0.251, significant at $p \leq 0.05$. R squared for
Model 2 increased to 0.247 with a SE of the estimate at 0.4470. In Model 3, the independent parent marital status was entered, along boundary consensus, family membership and structure, and the control variable parents’ income. Beta for Model 3 is 0.343 significant at \( p \leq 0.05 \). Boundary consensus has a significant effect in this model with a Beta of -0.217, significant at \( p \leq 0.05 \). Parents’ income has a significant effect in this model with a Beta of -0.261, significant at \( p \leq 0.05 \). R squared for Model 3 increased to 0.312 with a SE of the estimate at 0.4329.

**Table 4. Standardized Regression Coefficients for the Effect of Parent Marital Status on Boundary Ambiguity (N=85)**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Marital Status</td>
<td>0.430***</td>
<td>0.468**</td>
<td>0.343*</td>
</tr>
<tr>
<td>Boundary Consensus</td>
<td>-0.251*</td>
<td>-0.217*</td>
<td></td>
</tr>
<tr>
<td>Family Membership &amp; Structure</td>
<td>0.063</td>
<td>0.036</td>
<td></td>
</tr>
<tr>
<td>Students’ Age</td>
<td></td>
<td>0.089</td>
<td></td>
</tr>
<tr>
<td>Parents’ Income</td>
<td></td>
<td>-0.261*</td>
<td></td>
</tr>
<tr>
<td>R squared</td>
<td>0.185</td>
<td>0.247</td>
<td>0.312</td>
</tr>
</tbody>
</table>

\* \( p \leq 0.05 \) level (2-tailed).
\** \( p \leq 0.01 \) level (2-tailed).
\*** \( p \leq 0.001 \) level (2-tailed).

**Hypothesis II**

Hypothesis II states that boundary ambiguity has a negative relationship to students’ family functioning. This hypothesis is supported such that the lower the level of boundary ambiguity, the greater students’ family functioning. Table 3 shows the bivariate correlations. Of all the control variables assessed, only parents’ income has a significant bivariate correlation with student family functioning. A three-model regression analysis is used to test the hypothesis (Table 5), with students’ family functioning as the dependent variable. In Model 1, the independent variable is boundary ambiguity. Beta for Model 1 is -
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0.690, significant at $p \leq 0.001$. R squared for Model 1 is 0.477 with a SE of the estimate at 0.3540. In Model 2, the independent variable boundary ambiguity was entered, along with other variables important to the model: boundary ambiguity, family membership and structure, and parent marital status. Beta for Model 2 is -0.708, significant at $p \leq 0.001$. Family membership and structure has a significant effect in this model with a Beta of 0.362, significant at $p \leq 0.001$. Parent marital status has a significant effect in this model with a Beta of 0.387, significant at $p \leq 0.001$. R squared for Model 2 increased to 0.583 with a SE of the estimate at 0.3224. In Model 3, the independent variable boundary ambiguity was entered, along with the variables identified in Model 2 and the control variable parents’ income. Beta for Model 3 is -0.697, significant at $p \leq 0.001$. As identified in Model 2, family membership and structure has a significant effect in this model with a Beta of 0.365, significant at $p \leq 0.001$. Parent marital status has a significant effect in this model with a Beta of 0.401, significant at $p \leq 0.001$. The control variable parents’ income is not significant in this model. R squared for Model 3 increased marginally to 0.584 with a SE of the estimate at 0.3241.

Table 5. Standardized Regression Coefficients for the Effect of Students’ Boundary Ambiguity on Students’ Family Functioning (N=80)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Ambiguity</td>
<td>-0.690***</td>
<td>-0.708***</td>
<td>-0.697***</td>
</tr>
<tr>
<td>Boundary Consensus</td>
<td>0.150</td>
<td>0.147</td>
<td></td>
</tr>
<tr>
<td>Family Membership &amp; Structure</td>
<td>0.362***</td>
<td>0.365***</td>
<td></td>
</tr>
<tr>
<td>Parent Marital Status</td>
<td>0.387***</td>
<td>0.401***</td>
<td></td>
</tr>
<tr>
<td>Parents’ Income</td>
<td></td>
<td></td>
<td>0.040</td>
</tr>
<tr>
<td>R squared</td>
<td>0.477</td>
<td>0.583</td>
<td>0.584</td>
</tr>
</tbody>
</table>

***. $p \leq 0.001$ level (2-tailed).
Hypothesis III

Hypothesis III states that parent marital status has a negative relationship to boundary consensus. This hypothesis is rejected: students in nuclear families do not have higher levels of boundary consensus. Table 3 shows the bivariate correlations. Of all the control variables assessed, only students’ income and parents’ age have significant bivariate correlations with boundary consensus. A three-model regression analysis is used to test the hypothesis (Table 6), with boundary consensus as the dependent variable. In Model 1, the independent variable is parent marital status. Beta for Model 1 is -0.034, which is not significant. R squared for Model 1 is 0.001 with a SE of the estimate at 0.4505. In Model 2, the independent variable parent marital status was entered, along with boundary ambiguity and family membership and structure. Beta for Model 2 is 0.224, which is not significant. Only boundary ambiguity was significant with a Beta of -0.307, significant at $p \leq 0.05$. R squared for Model 2 increased to 0.091 with a SE of the estimate at 0.4352. In Model 3, the independent variable parent marital status was entered, along with the variables identified in Model 2 and the control variable parents’ age. Beta for Model 3 is 0.196, which is not significant. Parents’ age is significant with a Beta of 0.229, significant at $p \leq 0.05$. R squared for Model 3 increased to 0.161 with a SE of the estimate at 0.4238.
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<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Marital Status</td>
<td>-0.034</td>
<td>0.224</td>
<td>0.196</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td>-0.307*</td>
<td>-0.241</td>
<td></td>
</tr>
<tr>
<td>Family Membership &amp; Structure</td>
<td>0.171</td>
<td>0.180</td>
<td></td>
</tr>
<tr>
<td>Students’ Income</td>
<td></td>
<td>-0.136</td>
<td></td>
</tr>
<tr>
<td>Parents’ Age</td>
<td></td>
<td></td>
<td>0.229*</td>
</tr>
<tr>
<td>R squared</td>
<td>0.001</td>
<td>0.091</td>
<td>0.161</td>
</tr>
</tbody>
</table>

*.* \( p \leq 0.05 \) level (2-tailed).

Hypothesis IV

Hypothesis IV states that boundary consensus is positively related to students’ family functioning. This hypothesis is rejected. Table 3 shows the bivariate correlation. Of all the control variables assessed, only parents’ income has a significant bivariate correlation with students’ family functioning. A three-model regression analysis is used to test the hypothesis (Table 7), with students’ family functioning as the dependent variable. In Model 1, the independent variable is boundary consensus. Beta for Model 1 is 0.358, significant at \( p \leq 0.001 \). R squared for Model 1 was 0.128 with a SE of the estimate at 0.4570. In Model 2, the independent variable boundary consensus was entered, along with other variables important to the model: boundary ambiguity, family membership and structure, and parent marital status. Beta for Model 2 decreased drastically to 0.150, which is not significant \((p = 0.059)\). Boundary ambiguity has a significant effect in this model with a Beta of -0.708, significant at \( p \leq 0.001 \). Family membership and structure has a significant effect in this model with a Beta of 0.362, significant at \( p \leq 0.001 \). Parent marital status has a significant effect in this model with a Beta of 0.387, significant at \( p \leq 0.001 \). R squared for Model 2 increased drastically to 0.583 with a SE of the estimate at 0.3224. In Model 3, the
Examining premises of boundary ambiguity, independent variable boundary consensus was entered, along with the variables identified in Model 2 and the control variable parents' income. Beta for Model 3 is 0.147, which is not significant ($p = 0.066$). As identified in Model 2, boundary ambiguity has a significant effect in Model 3 with a Beta of $-0.697$, significant at $p \leq 0.001$. Family membership and structure has a significant effect in this model with a Beta of 0.365, significant at $p \leq 0.001$. Parent marital status has a significant effect in this model with a Beta of 0.401, significant at $p \leq 0.001$. The parent control variable is not significant in this model. R squared for Model 3 increased marginally to 0.584 with a SE of the estimate at 0.3241.

Table 7. Standardized Regression Coefficients for the Effect of Student's Boundary Consensus on Students' Family Functioning (N=80)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Consensus</td>
<td>0.358***</td>
<td>0.150</td>
<td>0.147</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td>-0.708***</td>
<td>-0.697***</td>
<td></td>
</tr>
<tr>
<td>Family Membership &amp; Structure</td>
<td>0.362***</td>
<td>0.365***</td>
<td></td>
</tr>
<tr>
<td>Parent Marital Status</td>
<td>0.387***</td>
<td>0.401***</td>
<td></td>
</tr>
<tr>
<td>Parents' Income</td>
<td></td>
<td></td>
<td>0.040</td>
</tr>
<tr>
<td>R squared</td>
<td>0.128</td>
<td>0.583</td>
<td>0.584</td>
</tr>
</tbody>
</table>

***. $p \leq 0.001$ level (2-tailed).

Hypothesis V

Hypothesis V states that parent marital status is negatively related to family membership in structure. This hypothesis is supported, such that students in nuclear families have greater agreement on family membership and structure. Table 3 shows the bivariate correlations. Of all the control variables assessed, only parents' income has a significant bivariate correlation with family membership and structure. A three-model regression analysis is used to test the hypothesis (Table 8) with students' family functioning as the
dependent variable. In Model 1, the independent variable is parent marital status and the dependent variable is family membership and structure. Beta for Model 1 is -0.728, significant at $p \leq 0.001$. R squared for Model 1 is 0.531 with a SE of the estimate at 1.13. In Model 2, the independent variable parent marital status was entered, along with boundary ambiguity and boundary consensus. Beta for Model 2 is -0.742, significant at $p \leq 0.001$. None of the additional variables are significant. R squared for Model 2 increased marginally to 0.538 with a SE of the estimate at 1.13. In Model 3, the independent variable parent marital status was entered, along with the variables identified in Model 2, and the control variable parents' income. Beta for Model 3 is -0.756, significant at $p \leq 0.001$. As identified in Model 2, none of the variables are significant, including the control variable. R squared for Model 3 increased marginally to 0.539 with a SE of the estimate at 1.14.

Table 8. Standardized Regression Coefficients for the Effect of Parent Marital Status on Family Membership and Structure (N=80)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Marital Status</td>
<td>-0.728***</td>
<td>-0.742***</td>
<td>-0.756***</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td>0.039</td>
<td>0.027</td>
<td></td>
</tr>
<tr>
<td>Boundary Consensus</td>
<td>0.087</td>
<td>0.089</td>
<td></td>
</tr>
<tr>
<td>Parents' Income</td>
<td></td>
<td>-0.041</td>
<td></td>
</tr>
<tr>
<td>R squared</td>
<td>0.531</td>
<td>0.538</td>
<td>0.539</td>
</tr>
</tbody>
</table>

***. $p < 0.001$ level (2-tailed).

Hypothesis VI

Hypothesis VI states that family membership and structure is positively related to students' family functioning. This hypothesis is supported, such that the greater the agreement on family membership and structure, the greater the students family functioning. Table 3 shows the bivariate correlations. Of all the control variables assessed, only parents'
income has a significant bivariate correlation with students’ family functioning. A three-model regression analysis is used to test the hypothesis (Table 9) with students’ family functioning as the dependent variable. In Model 1, the independent variable is family membership and structure and the dependent variable is students’ family functioning. Beta for Model 1 is 0.310, significant at $p \leq 0.01$. $R^2$ for Model 1 is 0.096 with a SE of the estimate at 0.4653. In Model 2, the independent variable family membership and structure was entered, along with other variables important to the model: boundary ambiguity, boundary consensus, and parent marital status. Beta for Model 2 is 0.362, significant at $p \leq 0.001$. Boundary ambiguity has a significant effect in this model with a Beta of -0.708, significant at $p \leq 0.001$. Parent marital status has a significant effect in this model with a Beta of -0.387, significant at $p \leq 0.001$. $R^2$ for Model 2 increased drastically to 0.583 with a SE of the estimate at 0.3224. In Model 3, the independent variable family membership and structure was entered, along with the variables identified in Model 2 and the control variable parents’ income. Beta for Model 3 is 0.365, significant at $p \leq 0.001$. As identified in Model 2, only boundary ambiguity and parent marital status have significant effects in this model with Betas of -0.697, significant at $p \leq 0.001$ and 0.401, significant at $p \leq 0.001$. $R^2$ for Model 3 increased marginally to 0.584 with a SE of the estimate at 0.3241.
Table 9. Standardized Regression Coefficients for the Effect of Family Membership and Structure on Students’ Family Functioning (N=80)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Membership &amp; Structure</td>
<td>0.310**</td>
<td>0.362***</td>
<td>0.365***</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td>- 0.708***</td>
<td>- 0.697***</td>
<td></td>
</tr>
<tr>
<td>Boundary Consensus</td>
<td>0.150</td>
<td>0.147</td>
<td></td>
</tr>
<tr>
<td>Parent Marital Status</td>
<td>0.387***</td>
<td>0.401***</td>
<td></td>
</tr>
<tr>
<td>Parents’ Income</td>
<td></td>
<td>0.040</td>
<td></td>
</tr>
<tr>
<td>R squared</td>
<td>0.096</td>
<td>0.583</td>
<td>0.584</td>
</tr>
</tbody>
</table>

**. p < 0.01 level (2-tailed).
***. p < 0.001 level (2-tailed).

Post Hoc Analyses

Data that were collected permitted further examination of the relationship of the independent variables boundary ambiguity and boundary consensus to the dependent variable family functioning. In the regressions above, the student’s family functioning score is used as the dependent variable. Family functioning was also assessed from the parents. Recall that during data collection, students were asked to offer a corresponding survey to one of their parents. This survey assessed a variety of demographics about the parent, along with the parent’s family functioning score (Appendix B). After running correlations between the parents’ family functioning and all the variables, including gender, of the student’s model (Table 10), running regressions with parent family functioning became feasible.
Table 10. Pearson’s Correlation Coefficients for Student’s Model with Parents’ Family Functioning Score

<table>
<thead>
<tr>
<th></th>
<th>Parent Marital Status</th>
<th>Gender of Student</th>
<th>Boundary Ambiguity</th>
<th>Boundary Consensus</th>
<th>Family Membership &amp; Structure</th>
<th>Student Family Functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Family Functioning</td>
<td>-0.115 N=160</td>
<td>0.117 N=160</td>
<td>-0.691** N=160</td>
<td>0.412** N=146</td>
<td>0.247* N=92</td>
<td>1.000</td>
</tr>
<tr>
<td>Parent Family Functioning</td>
<td>0.001 N=98</td>
<td>0.261** N=98</td>
<td>-0.285** N=98</td>
<td>0.441** N=87</td>
<td>0.022 N=92</td>
<td>0.507**</td>
</tr>
</tbody>
</table>

*. p < 0.05 level (2-tailed).
**. p < 0.01 level (2-tailed).

Two post-hoc analyses were conducted. The first post-hoc analysis explores students’ boundary ambiguity as having a negative relationship to parents’ family functioning. This hypothesis is supported, such that the lower students’ level of boundary ambiguity, the greater parents’ level of family functioning. Table 10 shows the bivariate correlations. Of all the control variables assessed, only students’ gender has a significant bivariate correlation with parents’ family functioning. A three-model regression analysis is used to test the hypothesis (Table 11), with parents’ family functioning as the dependent variable. In Model 1, the independent variable is boundary ambiguity. Beta for Model 1 is -0.263, significant at $p \leq 0.05$. R squared for Model 1 is 0.069 with a SE of the estimate at 0.4100. In Model 2, the independent variable boundary ambiguity was entered, along with other variables important to the model: boundary consensus, family membership and structure, and parent marital status. Beta for Model 2 decreased to -0.252, and is significant at $p \leq 0.05$. Only boundary consensus has a significant effect in this model with a Beta of 0.276, and is significant at $p \leq 0.05$. R squared for Model 2 increased to 0.169 with a SE of the estimate at 0.3950. In Model 3, the independent variable boundary ambiguity was entered, along with the variables identified in Model 2, and the control variable gender of student. Beta for Model 3 is -0.252, significant at $p \leq 0.05$. Again, only boundary
consensus has a significant effect in Model 3 with a Beta of 0.250, significant at $p \leq 0.05$. R squared for Model 3 increased to 0.205 with a SE of the estimate at 0.3889.

**Table 11** Standardized Regression Coefficients for the Effect of Students’ Boundary Ambiguity on Parent’s Family Functioning (N=80)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Ambiguity</td>
<td>-0.263*</td>
<td>-0.252*</td>
<td>-0.252*</td>
</tr>
<tr>
<td>Boundary Consensus</td>
<td>0.276*</td>
<td>0.250*</td>
<td></td>
</tr>
<tr>
<td>Family Membership &amp; Structure</td>
<td>0.076</td>
<td>0.072</td>
<td></td>
</tr>
<tr>
<td>Parent Marital Status</td>
<td>0.199</td>
<td>0.216</td>
<td></td>
</tr>
<tr>
<td>Students’ Gender</td>
<td></td>
<td></td>
<td>0.193</td>
</tr>
<tr>
<td>R squared</td>
<td>0.069</td>
<td>0.169</td>
<td>0.205</td>
</tr>
</tbody>
</table>

*. $p < 0.05$ level (2-tailed).

The second post-hoc analysis explores student’s boundary consensus as having a positive relationship to parents’ family functioning. This hypothesis is supported, such that the greater the students’ level of boundary consensus, the greater the parents’ level of family functioning. Table 10 shows the bivariate correlations. Of all the control variables assessed, only students’ gender has a significant bivariate correlation with parents’ family functioning.

A three-model regression analysis is used to test the hypothesis (Table 12) with parents’ family functioning as the dependent variable. In Model 1, the independent variable is boundary consensus. Beta for Model 1 is 0.343, significant at $p \leq 0.01$. R squared for Model 1 is 0.118 with a SE of the estimate at 0.3991. In Model 2, the independent variable boundary consensus was entered, along with other variables important to the model: boundary ambiguity, family membership and structure, and parent marital status. Beta for Model 2 is 0.276, which is significant at $p \leq 0.05$. Boundary ambiguity has a significant effect in Model 2 with a Beta of -0.252, significant at $p \leq 0.05$. R squared for Model 2
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generated to 0.169 with a SE of the estimate at 0.3950. In Model 3, the independent variable boundary consensus was entered, along with the variables identified in Model 2, and the control variable gender of students. Beta for Model 3 decreased to 0.250, which is significant at $p \leq 0.05$. Only boundary ambiguity has a significant effect in Model 3 with a Beta of -0.252, significant at $p \leq 0.05$. $R$ squared for Model 3 increased to 0.205 with a SE of the estimate at 0.3889.

Table 12. Standardized Regression Coefficients for the Effect of Students' Boundary Consensus on Parents' Family Functioning (N=80)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Consensus</td>
<td>0.343**</td>
<td>0.276*</td>
<td>0.250*</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td>-0.252*</td>
<td>-0.252*</td>
<td></td>
</tr>
<tr>
<td>Family Membership   &amp; Structure</td>
<td>0.076</td>
<td>0.072</td>
<td></td>
</tr>
<tr>
<td>Parent Marital Status</td>
<td>0.199</td>
<td>0.216</td>
<td></td>
</tr>
<tr>
<td>Students' Gender</td>
<td></td>
<td></td>
<td>0.193</td>
</tr>
<tr>
<td>$R$ squared</td>
<td>0.118</td>
<td>0.169</td>
<td>0.205</td>
</tr>
</tbody>
</table>

* $p \leq 0.05$ level (2-tailed).

Recall that in the univariate section a panel of readers were asked to assess the distinction between boundary consensus and boundary ambiguity. Less than perfect distinction suggested a need for further analyses. Factor analyses (Principal Component Analysis, or PCA) were performed on each of the scales. Results suggest that boundary ambiguity is composed of a total of 6 factors and boundary consensus is composed of a total of 3 factors. In addition, a bivariate correlation matrix was computed to examine semantic overlap. A bivariate correlation coefficient between an item on boundary consensus and an item on boundary ambiguity that was greater than $r = 0.20$ was considered a significant semantic overlap. Three items in particular account for this semantic overlap. The scale for
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non-residential parents is used to list these three items. Boundary consensus assesses the frequency of disagreements with the respondent’s family on a variety of indicators. These items are as follows: “...information related to family interactions that you can disclose to your non-residential parent”; “... the extent to which family rules for behavior are followed when your non-residential parents is present”, and “... the general way the family is functioning when your non-residential parent is present”. Results from the factor analyses (PCA) and bivariate correlations suggest a need for further analysis.

Post Post Hoc

The 3 problematic items described above were deleted and the remaining 7 items re-formed the boundary consensus scale. The post hoc analysis examining the relationship between boundary consensus and parents family functioning was performed again. Below are the results of the univariate description, item analysis, factor analysis, and regression analysis on the boundary consensus scale without the 3 problematic items.

The univariate description of the boundary consensus scale as measured by a summative index of 7 items on a 5-point likert scale are as follows. There are 150 valid cases with 10 missing using the listwise method. Chronbach’s alpha for the scale is 0.7722. The minimum score is 1.86 and the maximum is 5.00 producing a range of 3.14. The mean, median and mode are 4.54, 4.7143, and 5.00 respectively, with a standard deviation of 0.5090. Skewness is at -2.190 with a standard error of 0.198. Kurtosis is at 6.705 with a standard error of 0.394. The skewness to standard error ratio is 11.0606, which significantly skewed. The kurtosis to standard error ratio is 17.0777, which is judged to be significantly kurtotic. The lack of variation is not viewed as problematic since it simply makes the null hypothesis more likely. A factor analysis of boundary consensus before deleting the three items indicated that the concept had 3 factors. After deleting these problematic items, the factor analysis indicates that the concept has 2 factors. Item numbers 2, 4, 6, 7, and 8 load
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onto one factor and item numbers 9 and 10 load onto the other factor. Recall that boundary consensus is composed of consensus about boundary permeability and role consensus relating to external boundaries. In the measures section it was explained that item numbers 9 and 10 were designed to measure role consensus about external boundaries. As such, the first factor is labelled consensus on boundary permeability and the second factor is labelled role consensus about external boundaries.

The hypothesis that students' boundary consensus is positively related to parents' family functioning will be re-explored. This hypothesis is supported, such that the greater the students' level of boundary consensus, the greater the parents' level of family functioning. Table 10 shows the bivariate correlations. Of all the control variables assessed, only students' gender has a significant bivariate correlation with parents' family functioning. A three-model regression analysis is used to test the hypothesis (Table 13) with parents' family functioning as the dependent variable. In Model 1, the independent variable is boundary consensus. Beta for Model 1 is 0.285, significant at $p \leq 0.01$. R squared for Model 1 is 0.081 with a SE of the estimate at 0.4134. In Model 2, the independent variable boundary consensus was entered, along with other variables important to the model: boundary ambiguity, family membership and structure, and parent marital status. Beta for Model 2 is 0.237, which is significant at $p \leq 0.05$. Boundary ambiguity has a significant effect in Model 2 with a Beta of -0.274, significant at $p \leq 0.05$. R squared for Model 2 increased to 0.151 with a SE of the estimate at 0.4048. In Model 3, the independent variable boundary consensus was entered, along with the variables identified in Model 2, and the control variable gender of students. Beta for Model 3 decreased to 0.211 which is significant at $p \leq 0.05$. Only boundary ambiguity has a significant effect in Model 3 with a Beta of -0.272, significant at $p \leq 0.05$. R squared for Model 3 increased to 0.183 with a SE of the estimate at 0.3998.
Table 13. Standardized Regression Coefficients for the Effect of Students’ Boundary Consensus on Parents’ Family Functioning (N=81)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Consensus</td>
<td>0.285**</td>
<td>0.237*</td>
<td>0.211*</td>
</tr>
<tr>
<td>Boundary Ambiguity</td>
<td></td>
<td>-0.274*</td>
<td>-0.272*</td>
</tr>
<tr>
<td>Family Membership</td>
<td>0.149</td>
<td>0.141</td>
<td></td>
</tr>
<tr>
<td>&amp; Structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent Marital Status</td>
<td>0.256</td>
<td>0.268</td>
<td></td>
</tr>
<tr>
<td>Students' Gender</td>
<td></td>
<td></td>
<td>0.181</td>
</tr>
<tr>
<td>R squared</td>
<td>0.081</td>
<td>0.151</td>
<td>0.183</td>
</tr>
</tbody>
</table>

*. \( p \leq 0.05 \) level (2-tailed).  **. \( p \leq 0.01 \) level (2-tailed).
CHAPTER 6
DISCUSSION

Summary of Findings

The findings offer support for the theoretical model that states parent marital status influences levels of boundary ambiguity and family membership and structure, which both in turn influence levels of students' family functioning. The findings do not support the theoretical model that parent marital status influences boundary consensus which, in turn, influences students' family functioning. A discussion of the post-hoc analyses with parents' family functioning as the dependent variable will follow a discussion of the hypotheses.

Hypothesis 1

The results from the statistical analyses of this study suggest that parent marital status is significantly related to boundary ambiguity. Furthermore, the predicted positive relationship was sustained. Students whose parents have separated or divorced had higher levels of boundary ambiguity than students in nuclear families. It appears that no prior study has analysed this specific hypothesis using the scale for boundary ambiguity for adult children of divorce. One published research study (Madden-Derdich, Leonard & Christopher, 1999) has examined boundary ambiguity on a sample of divorced adults; however, the main effect between boundary ambiguity and divorce was not tested. In other words, the sample only consisted of divorced adults and not adults in their first marriages/unions. Other studies report ambiguous boundaries (not Boss’ boundary ambiguity) to be important in the study of divorce (Emery & Dillon, 1994; Emery, 1994). While prior research suggested that the hypothesis would be supported, it is interesting that separation and divorce does not have a higher predictive relationship to boundary ambiguity, especially since the concept of boundary ambiguity is designed to capture circumstances of high family stress, such as divorce. This may be an indication that a review of the boundary
ambiguity scale is warranted. Nevertheless, results of this study lend enough support for the continuing use of the boundary ambiguity scale for adult children of divorce.

**Hypothesis II**

The results from the statistical analyses of this study suggest that boundary ambiguity is significantly related to family functioning. Furthermore, the predicted negative relationship was sustained, such that the lower the level of boundary ambiguity, the higher the level of family functioning. It appears that no prior study has examined this hypothesis. The only study that uses family functioning was Boss’ (1980a) study that made use of the Moss and Moss Family Environment Scale (FES), but an earlier version of the variable boundary ambiguity, called Psychological Father Presence, was used. In Boss’ (1980a) study, as reported in Boss, Greenberg, and Pearce-McCall (1990b), correlations to boundary ambiguity were reported for the achievement, organization, control scale, and rigidity/flexibility dimensions of the FES. The results from this study give weight to Boss’ claim that, although boundary ambiguity is an individual measure, it influences a familial concept.

Further explanations for the relationship between boundary ambiguity and family functioning can be found in systems theory. A basic premise of systems theory is that homeostasis of a system is functional. In practice, however, we know of circumstances in which homeostasis is not functional, and that the system is better undergoing morphogenesis. For example, it has been claimed that over the long-term, children who are in single-parent families function better on a variety of indicators than children whose parents remain together but are in constant conflict. Just as there are cases where homeostasis of a system may not be functional, homeostasis of perception after a system has changed may not be functional. According to Reuben Hill (1971), as cited in Boss (1980a, p. 541), social systems must be “capable of morphogenesis or of changing their basic structure, organization, and
values in order to remain viable”. Recall boundary ambiguity is the study of the way marital and parent-child subsystem boundaries are perceived. Circumstances such as divorce call for a way these boundaries are perceived. Boss (1980a) continues Hill’s comments about morphogenesis by suggesting that when there is a lack of clarity surrounding the basic organization in the family, such as ambiguous perceptions about sub-system boundaries, that reduced family functioning can occur.

**Hypothesis III**

The results from the statistical analyses of this study suggest that parent marital status is not significantly related to boundary consensus. Students whose parents have separated or divorced do not have higher levels of boundary consensus than students from nuclear families. Divorce changes family structure. Since family dynamics change when family structure changes (Aldous, 1996), and boundaries need to be renegotiated (Emery, 1994), it was suggested that parent marital status would have a direct main effect on boundary consensus. Research finds boundaries are impacted as a result of divorce. Research on boundary ambiguity in this study, as well as Madden-Derdich et al.’s (1999) study, and on boundary permeability (Amato, 2000; Emery, 1994; Emery & Dillon, 1994, Maccoby et al., 1992, & Gray & Coleman, 1985) provide grounds for this claim. These studies concern the regulation of *inter-personal* boundary processes. Boundary consensus, however, concerns the regulation of *external* boundary processes. One could argue that the claim that boundary consensus is not impacted by divorce due to external boundaries processes is not valid because family structure, which is partially captured in the variable in this study called family membership and structure, is related to divorce. A counter-argument is that external boundary processes differ from the study of external boundary structures. To distinguish between process and structure, processes involve the study of relationships where as structure involves the study of membership, or what is objectively visible. Boundary
consensus involves the former study of boundaries where as family membership involves the latter study. In summary, it appears that external boundary processes are not impacted by divorce, where as external boundary structures and inter-personal boundary processes are impacted by divorce. Results from this study can only conclude that separation/divorce does not predict boundary consensus.

Hypothesis IV

The results from the statistical analyses of this study suggest that boundary consensus is not significantly related to students’ family functioning. While boundary consensus is highly significant in model 1, both beta weights and significance levels drop off when variables important to the theoretical model are entered. As boundary consensus is a new variable being designed and tested in this study for the first time, suggestions for its relationship to family functioning was derived from theoretical research. Recall boundary consensus is comprised of role consensus and boundary permeability. Since role consensus and boundary permeability have been proposed to link to satisfaction and family functioning respectively (Burr, Leigh, Day & Constantine, 1979; Anderson & Sabatelli, 1999), it was anticipated that the combination of these variables would also yield significant predictions. It appears though, that when entered into a predictive model with highly significant variables such as boundary ambiguity and family membership and structure, the predictive value of boundary consensus is not strong enough.

A theoretical explanation that supports the findings in this study relates to perceptions of stress. The ABCX model of family stress could be applied to individual perceptions of stress in the family system to explain why there is no significant relationship between students’ boundary consensus and their family functioning score. Recall that in the basic model, factor A represents the event, B represents family resources, C represents the definition of the situation, and X represents the crisis (McCubbin, Thompson, & McCubbin,
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1996. The “C factor,” or herein referred to as the perceptual factor, describes an assessment of the seriousness of the given event and the consequence of hardship to determine whether to interpret the event as a stressor (McCubbin et al., 1996). It appears that for students, whether or not there is boundary consensus in the family (“A”) does not impact their assessment of family functioning (the outcome, or “X”).

Hypothesis V

The results from the statistical analyses of this study suggest that parent marital status is significantly related to family membership and structure. Furthermore, the predicted negative relationship was sustained such that there is greater agreement between the parent and child on family membership and structure in nuclear families than in separated/divorced families. A number of studies (Furstenberg & Nord, 1985; Pasley, 1987, 1994; Pasley & Ihinger-Tallman, 1989, Peterson and Zill, 1986, Rosenberg & Guttmann’s, 2001) have found family membership and structure to be significant variables in the study of divorce and remarriage. By using parent marital status as an independent variable, family membership and structure scores for students whose parents had separated or divorced could be compared against the scores for students in nuclear families. The first component to family membership and structure is agreement on family membership. A comparison between nuclear and divorced families appears to have only been made in Rosenberg and Guttmann’s (2001) study on family membership, where children whose parents had divorced had less agreement on family membership than children whose parents were together. Results from Rosenberg and Guttmann’s (2001) study lend support to results of this study that revealed a difference in scores between these two groups. The second component to family membership and structure is agreement on family structure. Pasley (1987, 1994) and Pasley and Ihinger-Tallman’s (1989) version of boundary ambiguity in part measured agreement on family structure in a sample of blended families. However a comparison between blended
and nuclear families was not made. It is evident, however, that divorce changes family structure (Aldous, 1996), as it entails at least one spouse, if not some of the children depending on custody arrangements, leaving the family home to relocate. Results of this study support previous research that a change in family form, such as in the case of separation and divorce, affects family membership and family structure.

**Hypothesis VI**

The results from the statistical analyses of this study suggest that family membership and structure is significantly related to students' family functioning. Furthermore, the predicted positive relationship was sustained. The greater the agreement between parent and child on family membership and structure, the greater the students' family functioning. No prior study has examined this hypothesis. The only other significant variable in subsequent tests of this model was boundary ambiguity (see Table 11). When boundary ambiguity was entered into the model, the predictive value increased drastically (from $R^2 = 0.096$ to 0.601). This finding suggests the boundary ambiguity is a much better predictor of family functioning than is family membership and structure.

The results of this study also suggest that family membership and structure and boundary ambiguity are moderately correlated ($r = -0.282$), but not highly correlated enough for the two variables to be the same variable, as Pasley (1987, 1994) and Pasley and Ihinger-Tallman (1980, 1989) suggested.

**Post Hoc**

Data collected from parents allowed for further exploration of two of the hypotheses. First, the results from the statistical analyses of this study suggest that students' boundary ambiguity is significantly related to parents' family functioning. The direction of the relationship is negative, such that the greater the students' level of boundary ambiguity the lower the parents' level of family functioning. The negative direction of relationships is the
same direction as the main effect of students' boundary ambiguity on students' family functioning. It appears that no prior study has examined this hypothesis. While the hypothesis is supported, the direct relationship between the variables yields a low predictive value (R squared = 0.069). The low R squared value may be due to the way each of these variables is measured. Boundary ambiguity is an individual measure and the scale herein uses the adult child's perceived ambiguity regarding the parental sub-system boundaries. Parents' family functioning measures parents' perception of whole family functioning without regard to any particular sub-system. While the students' boundary ambiguity is highly correlated to their perception of whole family functioning, the parents' may not perceive the same level of boundary ambiguity in their marital or ex-marital relationship than their child.

The only other significant variable in subsequent tests of the main effect between boundary ambiguity and parents' family functioning is boundary consensus (see Table 11). When boundary consensus was entered into the model, the predictive value increased from R squared = 0.069 to R squared = 0.169. This finding suggests that boundary consensus appears to be a better predictor of parents' family functioning than is boundary ambiguity. A second post hoc model found that students' boundary consensus is significantly related to parents' family functioning. The direction of the relationship is positive, which is the same direction as the main effect of students' boundary consensus on students' family functioning. The greater the boundary consensus reported by the student, the greater the parents' level of family functioning. Contrarily, the students' hypothesis with boundary consensus was only significant until other variables important to the model were entered in the regression model. The difference in mean scores for students' and parents' family functioning should be made explicit. The students' mean score on family functioning is 2.96 with a standard deviation of 0.58. Parents' mean score on family functioning is 3.26 with a standard deviation of 0.45.
Parents perceive slightly higher levels of family functioning than do students. Students' mean score on boundary consensus is 4.39 with a standard deviation of 0.52, indicating high levels of boundary consensus. The high levels of boundary consensus co-vary with the slightly higher levels of family functioning reported by the parents than by the students.

Recall that the post hoc analysis examined the boundary ambiguity and boundary consensus scales further. Results from the factor analysis (PCA) of the boundary ambiguity scale suggests a larger than desirable number of factors for one scale. Before the scale is used in further research, it is recommended that scale items be re-examined. Results from the factor analysis (PCA) of the boundary consensus also suggest that deleting certain items may reduce the number of factors from the existing 3. However, the semantic overlap between boundary consensus and boundary ambiguity is a greater problem for the boundary consensus scale. Three items in particular had significant correlations to items on the boundary ambiguity scale. These 3 items appear to be related to consensus about inter-personal boundaries where as the other items on the scale that had significantly less or no semantic overlap with boundary ambiguity. Boundary ambiguity is designed to assess the extent to which the perceiver is clear on inter-personal boundaries in the parent-child and the mother-father relationships.

The 3 items of boundary consensus that correlate with boundary ambiguity resulting in semantic overlap between the two concepts are reviewed. The first troublesome item of boundary consensus assesses consensus about information related to family interactions disclosed to a parent. Clearly, this item does not assess external boundaries, as boundary consensus intends to assess, but information that is transmitted between inter-personal relationships. The second troublesome item assesses consensus about rules followed when parents are present. Again, this item asks about rules enacted in social interactions between parent and child that do not directly concern the rules of external boundary maintenance.
The third troublesome item of boundary consensus assesses consensus on the general way the family is functioning when the parent is present. This item is too similar to the McMaster's general family functioning scale. The high correlation between this item that asks about family functioning and almost every item of the boundary ambiguity scale could be explained by the high correlation between boundary ambiguity and family functioning. This single item may largely explain the significant finding between boundary consensus and parents' family functioning. In summary, while the items specify that they are measuring consensus and not clarity, the underlying dimension of examining inter-personal boundaries, and not external boundaries, is still assessed, which is not what boundary consensus intended to measure.

The post post hoc analysis deleted these 3 problematic items from the boundary consensus scale and re-ran the post hoc hypothesis that boundary consensus is positively related to parents' family functioning. The hypothesis was again supported. Beta decreased slightly from 0.343 to 0.285 and R squared decreased from 0.12 to 0.08. The results suggest that there is some evidence for boundary consensus as the concept. The idea for a concept called boundary consensus arose from a pilot study with an astronaut family, which is a family in which the main bread earner works in his/her country of origin while the family relocates to a new country. Astronaut couples belong to a larger category of commuter couples, which has become an increasingly popular lifestyle choice with the increase in globalization. Due to the extremely difficult and expensive nature of sampling commuter couples, the population for this study became families that had undergone a separation or divorce. This population was chosen not because research suggested there would be clear evidence for boundary consensus, but because research suggested there would be clear evidence for boundary ambiguity. The boundary consensus scale was developed based on general theoretical knowledge, however it was tested on a specific population: students.
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residing with one or both parents. The scale would need considerable revisions before being re-tested.
One of the objectives of this study was to examine the applicability of boundary ambiguity to divorce. A unique feature of this study is the examination of a situational context in which boundary ambiguity is expected to be low, namely, examining boundary ambiguity in nuclear families. Berry (1990) noted that the development of a scale for families not experiencing a specific loss would increase the utility of the scale. This study has modified the Boundary Ambiguity Scale for Adult Children of Divorce (BAS-4) so that students' whose parents had experienced a separation or divorce could be compared with students' who had not experienced this loss. The results support the continued use of the BAS-4. Furthermore, while boundary ambiguity is referred to as a family construct, few empirical studies have measured boundary ambiguity with family outcome variables. Boss and colleagues (1987) found a significant relationship between boundary ambiguity and a variety of indicators of family health and somatization. Psychological Father Presence Scale (PFP), which is the scale on which all of the BAS' are based, correlated to certain sub scales of the Moos and Moos (1981) Family Environment Scale (FES). This study found significant results using the NLSCY version of the popular McMaster Family Functioning Scale.

Pasley and Ihinger-Tallman’s version of boundary ambiguity was relabelled family membership and structure in this study as a result of an examination of boundary ambiguity theory and studies on family membership. This scale does not appear to have been used by other researchers of boundary ambiguity theory, suggesting that it is not accepted as a measure of boundary ambiguity. In this study, the measure does, however, have some empirical validity as it has a direct main effect on family functioning. Its relationship to
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parent marital status also suggests that it captures a phenomenon in separated and divorced families that is not as important in nuclear families.

This study presented boundary consensus as a concept and tested a scale based on Kantor and Lehr’s (1975) theoretical foundations of boundary maintenance. Kantor and Lehr (1975) address ways families establish, maintain, and regulate boundaries. A premise of the scale is that perceived agreement about external boundary maintenance and roles is equated with an atmosphere that is psychologically supportive, thus promoting family functioning. As a result of the post hoc analysis examining the boundary consensus scale, it is concluded there is some evidence for the relationship between boundary consensus and parents’ family functioning.

Limitations of the Study

The limitations of the study relate to the sampling frame and the survey itself. The first limitation of this study concerning the sampling frame is the distribution of student respondents by gender. In total 83.8% of the sample was female. This survey was introduced as a survey about “family life and living at home”. As females have a greater focus on relationships than males (Brehm, Miller, Perlman and Campbell, 2002), it is possible that the nature of the study seemed more interesting to females, making them more likely to take and return a survey. It is possible that a disproportionate amount of female respondents could have affected the results of this study. Mangione’s (1995) summary of mail survey research finds males are categorized as nonresponders, potentially creating non-response bias. However, gender was not a significant control variable in any of the hypotheses or post hoc findings, suggesting that a typical response given by a male is equal to a typical response given by a female in this study.

A second limitation of the sampling frame is the sample of respondents whose parents had separated or divorced. A total of 481 surveys had to be distributed to obtain a
sample of 30 respondents from this group. Furthermore, because of the difficult nature of collecting respondents, separated cases could not be analysed separately from divorced cases. Research with a larger number of respondents from both of these categories may enhance the findings of this study. Hopefully, this limitation is minimized by the fact that this study concerns family structure and boundaries, both of which are impacted by either a separation or divorce.

A third limitation concerning sampling frame is that respondents were students who had at least some university, and parent respondents on average had a college diploma. As such, findings can only be generalized to a group of highly educated persons.

The first limitation concerning the survey itself is an error that went undetected in the printing process for the parent version of the survey. As mentioned in the measures section, on the dimension of family membership on the variable family membership and structure, the question asked about biological family members, but the identical question on the student survey did not include the term biological. Only 9.8% of the (parent) respondents who answered this question chose to include biological family members such as their parents or siblings, where as their child did not list those people. It seemed inappropriate to force these respondents into a category of either agree or disagree, especially since such a small percentage of the parent sample chose to include members from their family of origin. It is possible that a different set of family dynamics or individual characteristics was operating in those who followed the instructions to the letter. As such, a decision was made to code this category separately.

The second limitation concerning the survey relates to the boundary ambiguity scale (BAS-4). There may be content overlap between the boundary ambiguity scale and the family functioning scale. This study found that the BAS-4 has a high number of factors (6). It appears that some item on the BAS-4 assess family functioning and not boundary
ambiguity. For example, item number 3 asks “My parents and I can solve family problems together”. This content overlap may be why there is a high correlation between these two variables (-0.691). It is suggested that an item-by-item bivariate correlation matrix between these two variables be conducted to shed more light on this issue.

Contributions to the Field

No existing study has examined theoretical premises of boundary ambiguity theory. This study validates the use of boundary ambiguity as a family construct. In addition, the boundary ambiguity for divorced adults scale was modified so that its’ applicability could be confirmed. A factor analysis on the scale suggests need for revisions, which may strengthen its applicability for the population it was designed to measure. This study also suggests that Pasley (1987, 1994) and Pasley and Ihinger-Tallman’s (1989) concept of boundary ambiguity is not the same as Boss’ concept of boundary ambiguity, as indicated by the low correlation between the variables. However, new findings are that the variable does predict students’ family functioning. Last, findings suggest some evidence for boundary consensus as a concept.

Future Research

While this study found support for boundary ambiguity as a family construct, it was only the second study to have investigated this premise. Further research would benefit the claim of boundary ambiguity as a family construct. The post hoc analyses revealed an interesting finding: that students’ boundary ambiguity has a substantially higher predictive value to students’ family functioning than it does to the parents’ family functioning. An investigation into these relationships would shed additional light on boundary ambiguity’s interaction as a family construct. In addition, the boundary ambiguity scale for divorced adults does not appear in any published research. The results of this study suggest that the scale has good internal reliability with predictive value. The divorce literature is saturated
with research investigating a variety of relationships, but very little of this research is theoretical in nature (Emery & Dillon, 1994). It is in the researcher’s opinion that this literature could make use of boundary ambiguity and concepts from the larger theories this concept is grounded in, namely family stress theory and systems theory. However, on a cautionary note, the boundary ambiguity scale for divorced adults (BAS-4) could be revised. A weaker than would be expected relationship between separation/divorce on boundary ambiguity and results of the factor analysis suggest there is improvement to be made on the BAS-4. Suggestions for improvement to this scale are further demonstrated by the high correlation between the BAS-4 and the family functioning scale. Last, further investigation into the theoretical groundwork and scale of boundary consensus, applied to a population where external boundary maintenance is of greater concern may result in a contribution to the field of family studies.
REFERENCES


*Handbook of family measurement techniques* (pp. 438-504). Newbury Park, CA: 
Sage Publications.


family. In W. R. Burr, R. Hill, F. I. Bye, & I. L. Reiss (Eds.) *Contemporary theories 
about the family: Vol.2 General theories/ theoretical orientations* (pp. 42-129). New 
York: The Free Press.

Caron, W., Boss, P., & Mortimer, J. (1999). Family boundary ambiguity predicts 

Emery, R. E. (1994). *Renegotiating family relationships: Divorce, child custody and 
mediation*. New York: Guilford Press.

boundaries of intimacy and power in the divorced family system. *Family Relations, 
43*, 4, 374-379.


functioning: A view of the normal family. In F. Walsh (Ed.), *Normal family 
processes* (pp. 115-164). New York: Guildford Press.


APPENDIX A

INFORMED CONSENT LETTER AND SURVEY FOR STUDENTS
THE UNIVERSITY OF BRITISH COLUMBIA

Family Dynamics Study

Principal Investigator: Dr. James White, School of Social Work and Family Studies, University of British Columbia. Telephone: 604 822 4683.

Co-investigator: Danielle Desfossés, B.A. (FMST), University of British Columbia. This study is being conducted to fulfill the thesis requirement of Danielle’s Master of Arts degree.

Purpose of Study: The central purpose of the study is to gain a better understanding of family life.

Who Can Participate: In order to be able to participate in this study, first, you must be a University of British Columbia student 19 years or older. Second, you must be able to fill out a paper-pencil test by yourself. Third, you must be living with one or both of your parents.

Procedures: You will be asked to complete some demographic information and 4 short questionnaires related to family well being. Your participation will require approximately 25 minutes of your time. The survey is to be completed at your convenience. No course credits will be given for participating in this study and as such, your refusal to participate will not affect your grade in the course. If your parent chooses to fill out a survey, it is very important that you complete the survey independently of your parent. Student and parent surveys are matched with a code number for the purpose of identifying family units.

Danielle Desfossés or Dr. White will instruct you as to how the surveys should be returned at the time the surveys are distributed. The surveys will either be collected at the beginning of your next class period or you will receive a self-addressed stamped envelope.

There are no anticipated risks for participants in this study. Most likely, the experience of participating in survey research may in fact help you to gain some knowledge about the process. In addition, all persons who return a completed survey will have one of two chances to win a $50 cash prize. The winners will be mailed their prize.

Confidentiality: Information resulting from this research will be kept strictly confidential. The results will be used for research purposes only. If the results are published, only statistical data will be released. This means that the identity of the persons and the survey...
that one has returned will be kept completely confidential and not released to anyone for any reason. The surveys will be kept in a locked filing cabinet. Saving the data files on a floppy disk and storing the floppy disk in a locked filing cabinet will secure all data records that will be put on a computer disk. Only Danielle Desfossés and Dr. White will have access to the responses contained in the completed surveys. Five years after the data have been analyzed for publication, Danielle Desfossés will destroy the surveys by shredding the documents.

If you have any questions about this study, you may contact Dr. White at 604 822 4683. Your participation in this study is voluntary. Completing and returning this survey indicates your consent to participate in this study. You have the right to refuse to participate in this study. Further, you may terminate filling out the survey at any time without giving a reason. There are no penalties for not participating or withdrawing from the study. If you have any concerns about your rights or treatment as a research participant, you may contact the UBC Office of Research Services at 604 822 8598.

Your participation is greatly appreciated.

Sincerely,

James White, Ph.D.    and    Danielle Desfossés, B.A.
STUDENT SURVEY

1. What is your sex? □ female □ male

2. What is your present age? □ 19-21 years □ 26-35 years □ 46-55 years □ 65 + □ 22-25 years □ 36-45 years □ 56-64 years

3. What is your present marital status? Please check the appropriate box (es)
□ married □ separated □ cohabiting □ common law
□ divorced □ remarried □ single □ widowed

4. What is the highest level of education you have obtained?
□ some university □ Masters or postgraduate degree
□ B.A./B.Sc. □ MD/PhD

5. What is your annual income?
□ less than $10,000 □ $10,000-$14,999 □ $15,000-$19,999
□ $20,000-$29,999 □ $30,000-$39,999 □ $40,000-$49,999
□ $50,000-$59,999 □ $60,000-$79,999 □ $80,000-$99,999
□ $100,000-$139,999 □ $140,000 or more □ don’t know

6. In your immediate family, there has been
□ neither a divorce or separation □ 1 separation or divorce
□ 2 or more separations/divorces

If you answered neither, please skip to question #8

7. When did the most recent separation or divorce occur?
□ less than 1 year ago □ 3 years ago □ 6-7 years ago
□ 1-2 years ago □ 4-5 years ago □ more than 7 years ago

8. Are you adopted? □ no □ yes

9. What is your present living arrangement? (Check one)
□ live with one parent □ live in a step-family □ live with only sibling(s)
□ live with both parents □ live with room-mate(s)

10. How often did each of the following people visit your home in the last year?

<table>
<thead>
<tr>
<th></th>
<th>live with</th>
<th>once a week</th>
<th>every 2 weeks</th>
<th>once a month</th>
<th>every 3 months</th>
<th>every 6 months</th>
<th>once a year</th>
<th>did not see person</th>
</tr>
</thead>
<tbody>
<tr>
<td>i biological mother</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ii biological father</td>
<td></td>
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<tr>
<td>iii sibling(s) living</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>iv grandparent(s)</td>
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</tbody>
</table>
### Directions:
The following statements are about the changes that may have occurred in your family. Using the scale provided as your guideline, circle the number that best shows how you feel for each item. There are no right or wrong answers.

<p>| | | | | | |</p>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>I hope that my parents’ relationship with each other will improve.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>2</td>
<td>I worry about whether I am spending enough time with each of my parents.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>3</td>
<td>My parents and I can solve family problems together.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>4</td>
<td>I find myself being a go-between for my parents (e.g., carrying messages, making arrangements).</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>5</td>
<td>I feel as though each of my parents wants me to be on his/her side.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>6</td>
<td>I find it difficult to talk to my father about things I may need from him (money, time, advice).</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>7</td>
<td>I find it difficult to talk to my mother about things I may need from her (money, time, advice).</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>8</td>
<td>There are times when who I would define as a family member changes.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>9</td>
<td>My parents’ relationship disturbs me.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>10</td>
<td>I think about my mother and my father as a unit, as “my parents”.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>11</td>
<td>I feel comfortable talking about my mother in front of my father.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>12</td>
<td>I feel comfortable talking about my father in front of my mother.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>13</td>
<td>My family has clear rules about how money and financial arrangements should be handled.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>14</td>
<td>When I think about important future occasions (e.g. graduations, weddings) where my parents will be together, I worry about how they will behave.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>15</td>
<td>People on my father’s side of the family secretly ask me about my mother or ask me to say hello for them.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>16</td>
<td>People on my mother’s side of the family secretly ask me about my father or ask me to say hello for them.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>17</td>
<td>I worry about which family members I should or will be with on important holidays and special occasions.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>18</td>
<td>My parents say things about each other to me that makes me feel uncomfortable.</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>19</td>
<td>I feel comfortable in my parent(s)' home(s), like I belong</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>20</td>
<td>I feel that the relationship between my parents will negatively affect my relationships with my extended family (grandparents, uncles, aunts, cousins).</td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
</tbody>
</table>

If one or both of your parents has remarried or has been cohabiting for over one year, answer the following items. If neither parent has remarried or been cohabiting for over one year, skip items 21-25.
Examining premises of boundary ambiguity, 95

<p>| | | | | |</p>
<table>
<thead>
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</table>

Below, there are two boxes. Answer only one of the following two boxes. Using the scale provided circle the number that best describes how you feel. There are no right or wrong answers. It is important that you answer every item, even if you are unsure of your answer.

**Box A** (this page) is if you’re living with one biological parent who has separated, divorced, or remarried and your other biological parent has visited your home in the last year.

**Box B** (page 4) is for students with ANY other living arrangement.

| Box A: If you are living with one separated/divorced biological parent and your other biological parent has visited your home. |
|---|---|---|---|---|---|---|---|---|---|
|   | Never | Rarely | Sometimes | Often | Always |
| 1 |   |   |   |   |   |   |   |   |   |
| 2 |   |   |   |   |   |   |   |   |   |
| 3 |   |   |   |   |   |   |   |   |   |
| 4 |   |   |   |   |   |   |   |   |   |
| 5 |   |   |   |   |   |   |   |   |   |
| 6 |   |   |   |   |   |   |   |   |   |
| 7 |   |   |   |   |   |   |   |   |   |
| 8 |   |   |   |   |   |   |   |   |   |
| 9 |   |   |   |   |   |   |   |   |   |
| 10|   |   |   |   |   |   |   |   |   |

**How frequently do you have disagreements with your family about...**

1. Information related to family interactions that you can disclose to your non-residential parent.
2. Your non-residential parent entering your home.
3. The extent to which family rules for behavior are followed when your non-residential parent is present.
4. Who should be there when your non-residential parent is in your home.
5. The general way that the family is functioning when your non-residential parent is present.
6. The frequency at which your non-residential parent enters your home.
7. The length of time your non-residential parent stays in your home.
8. The time of day/night when your non-residential parent enters your home.
9. Any responsibilities you are to perform when your non-residential parent is present.
10. Any responsibilities you are to perform when your non-residential parent is absent.

<p>| | | | | |</p>
<table>
<thead>
<tr>
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</tbody>
</table>
Box B: Any other living arrangement.

How frequently do you have disagreements with your family about...

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. information related to family interactions that you can disclose to your parent(s).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. your parent(s) entering your home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. the extent to which family rules for behavior are followed when your parent(s) is/are present.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. who should be there when your parent(s) is in your home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. the general way that the family is functioning when your parent(s) is/are present.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. the frequency at which your parent(s) enter(s) your home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. the length of time your parent(s) stay(s) in your home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. the time of day/night when your parent(s) enter(s) your home.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. any responsibilities you are to perform when your parent(s) is/are present.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. any responsibilities you are to perform when your parent(s) is/are absent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Following are a number of statements about families. Please read each statement carefully, and decide how well it describes your own family in the last 6 months. You should answer according to how you see your family.

Try not to spend too much time thinking about each statement, but respond as quickly and as honestly as you can. If you have trouble with one answer choose your first reaction. Please be sure to answer every statement and to circle only one number per question.

- **STRONGLY AGREE:** describes your family very accurately.
- **AGREE:** describes your family for the most part.
- **DISAGREE:** does not describe your family for the most part.
- **STRONGLY DISAGREE:** does not describe your family at all.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Planning family activities is difficult because we misunderstand each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. In times of crisis we can turn to each other for support.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. We cannot talk to each other about the sadness we feel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Individuals are accepted for what they are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. We avoid discussing our fears and concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. We can express feelings to each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. There are lots of bad feelings in the family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. We feel accepted for what we are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Making decisions is a problem for our family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. We are able to make decisions about how to solve problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. We don’t get along well together.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. We confide in each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Below, we ask about your biological (e.g. mom, dad, siblings) family members relationship to you and whether they live with you. **For example,** if you have 2 siblings, indicate their relationship to you as younger sibling and older sibling. If you consider step-siblings/parents to be part of your family, please include these persons as well.

1. Please tell us who are the people you consider to be your family members. List them, their age and sex.

<table>
<thead>
<tr>
<th>Relationship to You</th>
<th>Gender</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

2. Please tell us which family members live with you in your home at this time. List them, their age and sex.

<table>
<thead>
<tr>
<th>Relationship to You</th>
<th>Gender</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

3. Please tell us which family members, if any, do not live with you in your home at this time. List them, their age and sex.

<table>
<thead>
<tr>
<th>Relationship to You</th>
<th>Gender</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Thank you for completing this survey. Your contribution is greatly appreciated.

**Optional:** Contact information for prize to be delivered by mail.
You may choose to leave your (name)/ address below

__________________________________________

__________________________________________

__________________________________________
Examining premises of boundary ambiguity, 98

APPENDIX B

INFORMED CONSENT AND SURVEY FOR PARENTS

THE UNIVERSITY OF BRITISH COLUMBIA

School of Social Work and Family Studies
2080 West Mall
Vancouver, B.C. Canada V6T 1Z2
Tel: 604 822 2255 Fax: 604 822 8656

Family Dynamics Study

Principal Investigator: Dr. James White, School of Social Work and Family Studies, University of British Columbia. Telephone: 604 822 4683.

Co-investigator: Danielle Desfossés, B.A. (FMST), University of British Columbia. This study is being conducted to fulfill the thesis requirement of Danielle’s Master of Arts degree.

Purpose of Study: The central purpose of the study is to gain a better understanding of how families function.

Who Can Participate: In order to be able to participate in this study, first, you must have a child attending the University of British Columbia who is 19 years or older. Second, you must be single, cohabiting or married, but not widowed. Third, you must be able to fill out the survey with no assistance from either your partner/spouse or your child.

Procedures: You will be asked to complete some demographic information and 2 short questionnaires related to family well-being. Completing this survey will require approximately 10 minutes of your time. The survey is to be completed at your convenience. If your adult child chooses to fill out a survey, it is very important that you complete the survey independently of your child. Student and parent surveys are matched with a code number for the purpose of identifying family units.

Once you have completed the survey, please place it in the return stamped envelope located in your survey package. Please mail the survey within ten days of receiving it. If you choose to complete and return the survey and provide us with your contact information, you will have one of two chances to win $25 cash. The winners will be mailed their prize.

There no anticipated risks for participants in this study. Most likely, the experience of participating in survey research may in fact help you to gain some knowledge about the process.

Confidentiality: Information resulting from this research will be kept strictly confidential. The results will be used for research purposes only. If the results are published, only statistical data will
be released. This means that the identity of the persons and the survey that one has returned will be kept completely confidential and not released to anyone for any reason. The surveys will be kept in a locked filing cabinet. All data records that will be put on a computer disk will be secured by saving the data files on a floppy disk and storing the floppy disk in a locked filing cabinet. Only Danielle Desfossés and Dr. White will have access to the responses contained in the completed surveys. Five years after the data have been analyzed for publication, Danielle Desfossés will destroy the surveys by shredding the documents.

If you have any questions about this study, you may contact Dr. White at 604 822 4683. Your participation in this study is voluntary. Completing and returning this survey indicates your consent to participate in this study. You have the right to refuse to participate in this study. Further, you may terminate filling out the survey at any time without giving a reason. There are no penalties for not participating or withdrawing from the study. If you have any concerns about your rights or treatment as a research participant, you may contact the UBC Office of Research Services at 604 822 8598.

Your participation is greatly appreciated.

Sincerely,

James White, Ph.D. and Danielle Desfossés, B.A.
PARENT SURVEY

***PART 1***

1. What is your sex?  □ female  □ male

2. What is your present age? □ 35 year or under □ 46-55 years □ 61-64 years □ 36-45 years □ 56-60 years □ 65+

3. What is your present marital status? Please check the appropriate box(es)
   □ first marriage/ first union common law
   □ separated  What was the year of your final separation? _________
   □ divorced  What was the year of your divorce? _________
   □ remarried  In what year did you remarry? _________
   □ widowed  In what year did you become widowed? _________
   □ common law after divorce  In what year did you begin living common law? _______
   □ cohabiting  In what year did you begin cohabiting? _________
   □ single

4. What is the highest level of education you have obtained?
   □ no schooling  □ some college/university  □ Masters
   □ elementary  □ college diploma or postgraduate degree
   □ high school  □ B.A./B.Sc.  □ MD/PhD

5. What is your household’s annual income?
   □ less than $10,000  □ $10,000-$14,999  □ $15,000-$19,999
   □ $20,000-$29,999  □ $30,000-$39,999  □ $40,000-$49,999
   □ $50,000-$59,999  □ $60,000-$79,999  □ $80,000-$99,999
   □ $100,000-$139,999  □ $140,000 or more  □ don’t know

6. How often did each of the following people visit your home in the last year?

<table>
<thead>
<tr>
<th>live with</th>
<th>once a week</th>
<th>every 2 weeks</th>
<th>once a month</th>
<th>every 3 months</th>
<th>every 6 months</th>
<th>once a year</th>
<th>did not see person</th>
</tr>
</thead>
<tbody>
<tr>
<td>i  spouse from first marriage</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ii spouse from re-marriage</td>
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<td></td>
<td></td>
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<tr>
<td>iii biological child at UBC who gave you this survey</td>
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<td>iv your parent(s)</td>
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</table>
**PART 2** The next box on page 2 has a number of statements about families. Please read each statement carefully, and decide how well it describes your own family **in the last 6 months**. You should answer according to how you see your family.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning family activities is difficult because we misunderstand each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>In times of crisis we can turn to each other for support.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>We cannot talk to each other about the sadness we feel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Individuals are accepted for what they are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>We avoid discussing our fears and concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>We can express feelings to each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>There are lots of bad feelings in the family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>We feel accepted for what we are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Making decisions is a problem for our family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>We are able to make decisions about how to solve problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>We don’t get along well together.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>We confide in each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

***PART 3*** Below, we ask about your family members (e.g. spouse, children) relationship to you and whether they live with you. **For example**, if you have 3 children, indicate their relationship to you as younger child, middle child and oldest child, and also please indicate if they are from your first or subsequent marriages (e.g. youngest child, 1st marriage).

1. Please tell us who are the people you consider to be your biological family members. List them, their age and sex.

<table>
<thead>
<tr>
<th>Relationship to You</th>
<th>Gender</th>
<th>Age</th>
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</table>
2. Please tell us which family members live with you in your home at this time. List them, their age and sex.

<table>
<thead>
<tr>
<th>Relationship to You</th>
<th>Gender</th>
<th>Age</th>
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</table>

3. Please tell us which family members, if any, do not live with you in your home at this time. List them, their age and sex.

<table>
<thead>
<tr>
<th>Relationship to You</th>
<th>Gender</th>
<th>Age</th>
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</table>

Thank you for completing this survey. Your contribution is greatly appreciated.

Optional: Contact information for prize to be delivered by mail.

You may choose to leave your (name)/ address below

____________________________________

____________________________________

____________________________________

____________________________________