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THE RELATIONSHIP OF IMPLICIT FAMILY PROCESS RULES TO ADOLESCENT  
PSYCHOLOGICAL SYMPTOMS

by

Ian D. Feinauer

A dissertation submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Marriage and Family Therapy Program

Brigham Young University

April 2006

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BRIGHAM YOUNG UNIVERSITY  
GRADUATE COMMITTEE APPROVAL

of a dissertation submitted by

Ian D. Feinauer

This dissertation has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Jeffry H. Larson, Committee Chair

\_\_\_\_\_  
Date

\_\_\_\_\_  
Leslie L. Feinauer, Committee Member

\_\_\_\_\_  
Date

\_\_\_\_\_  
James M. Harper, Committee Member

\_\_\_\_\_  
Date

\_\_\_\_\_  
J. Kelly McCoy, Committee Member

\_\_\_\_\_  
Date

\_\_\_\_\_  
Richard B. Miller, Committee Member

BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the dissertation of Ian D. Feinauer in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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Date

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Jeffry H. Larson  
Chair, Graduate Committee

Accepted for the Program

---

Robert F. Stahmann  
Chair, Marriage and Family Therapy  
Program

Accepted for the College

---

James M. Harper  
Director, School of Family Life

## ABSTRACT

# THE RELATIONSHIP OF IMPLICIT FAMILY PROCESS RULES TO ADOLESCENT PSYCHOLOGICAL SYMPTOMS

Ian D. Feinauer

Marriage and Family Therapy Program

School of Family Life

Doctor of Philosophy

Implicit family process rules refer to unspoken rules about family beliefs and expectations about communication, closeness, and organization and are an important dimension of family functioning that may have a powerful influence over adolescent psychological well being. This study focused on the relationship between implicit family process rules and adolescent psychological symptoms such as: Hostility, interpersonal sensitivity, depression, anxiety, and somatization. It was hypothesized that more facilitative implicit family process rules would be related to fewer adolescent psychological symptoms. In addition, a model was created that included the exogenous

independent variables of family status, (defined as intact-marriage or non-intact), treatment status (whether the adolescent was currently in a psychological treatment program or not), and gender to test their relationships to implicit family process rules and adolescent psychological symptoms. A non-treatment sample (N=99) was recruited in Utah County, Utah, using a sample of convenience. The treatment sample (N=144) was recruited from an adolescent residential wilderness therapy program located in Duchesne County, Utah. The Brief Symptom Inventory (BSI) and the Family Implicit Rules Profile (FIRP) were administered to each participant along with a questionnaire requesting demographic information. Structural equation modeling was used to explore the relationships between the exogenous variables, facilitative implicit family process rules, and adolescent psychological symptoms. The model was tested using AMOS statistical software. Results showed that implicit family process rules were significantly related to adolescent psychological symptoms such that facilitative rules were related to fewer psychological symptoms. Males reported more constraining rules on the Expressiveness subscale of the FIRP while females reported more symptomology on the Interpersonal Sensitivity subscale of the BSI. These findings support previous research on family dynamics and psychological functioning and support the hypothesis that perceived implicit family process rules are important to study in adolescents. This research is a step toward a more epistemological approach to family therapy with adolescents as well as a step toward more preventative family therapy and education by addressing family rules. Implications for family therapists and future research are discussed.

## ACKNOWLEDGEMENTS

The one person who supported me most in this project is my dissertation chair, mentor, and friend Jeff Larson. Without him I could not have found the resolve to complete this project. Jeff Larson has seen my highs and my lows and has been the support I needed to get my Ph.D. He saw something in me when he took me on as a student and has always been available to provide much needed guidance and optimism.

I would also like to thank my other committee members who supported me and gave me the feedback I needed, whether it was easy to hear or not. In particular Jim Harper, who spent all the extra time needed to work out the details of the statistics, and was a guide through the details of the structure of the project. Also Leslie Feinauer, who allocated time for me when I felt especially stuck mentally and emotionally as well as challenging me when I needed it. Thanks as well to the rest of the BYU MFT faculty, who always seemed to have words of encouragement for me in halls the and in the classroom.

There were also many people along the way who encouraged me to pursue a Ph.D. when I was not sure that I would have chosen this path on my own. Most notably are Stephan Wilson who taught me tenacity and instilled a great deal of confidence in me as a researcher and Susan Smith who was a real teacher and validated in me that I have what it takes to be a therapist.



I have to thank my family for their endless support. My sisters Erika and Erin who have both been immersed in their own dissertations, but both took the time when I needed it to elucidate me in statistics and what it takes to endure to the end. They are both examples to me what it takes to maintain balance in my life.

Most of all, I need to thank my Heavenly Father. This has not been a short road, but I have felt his loving guidance along the way and believe that I was led to study Marriage and Family Therapy from an early age. His plan gives me direction and sense of purpose for which to direct my energies and use my talents.

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## Chapter I

### Introduction, Rationale for Study, Theoretical Context and Variables

The prevalence of severe behavioral problems and psychological disorders in adolescents is greater than ever and on the rise (U.S. Department of Health and Human Services, 1999). It is a common belief that poor family functioning contributes to an adolescent's negative well-being, while a healthy family can protect an adolescent from many of the psychological health risks that he or she might face. Researchers in the field of adolescent psychopathology have emphasized the role of the family environment in the etiology and maintenance of various psychological symptoms (Doane, 1978; L'Abate, 1998; Nichols & Schwartz, 1998).

Implicit family process rules are an important dimension of family functioning and may have a powerful influence over family members. Adolescents are particularly influenced at this stage of life because they are trying to understand interpersonal relationships, form more intimate ones, and make decisions about self-disclosure. For this reason, the study of how implicit family processes rules affect adolescent psychological functioning is of particular importance to study. Also, the psychological treatment of adolescents shows that there is an increasingly pressing need to understand how families influence adolescent development and symptom formation in order to facilitate and better understand interventions at the family level as well as the level of the individual adolescent (Carter & McGoldrick, 1999; Sells, 1998).

In the past it has traditionally been left to the clinician to make connections between family dysfunction and offspring's symptoms based on clinical reports from the

client. The process has generally been accessed through individual psychotherapy or other forms of qualitative methods and direct relationships between specific family dynamics and their effects on adolescents have only recently been empirically researched. While several theorists recognize that family rules are an important element of family process (Jackson, 1965; Becvar & Becvar, 1988; Nichols & Schwartz, 1995; Broderick, 1990) empirical literature on the implicit process rules in families remains in its initial stages (Stoll, 2003). Only one empirical study to date has been published in a professional journal. Larson and colleagues (2000) found that constraining family rules decreased the ability of young adults to establish intimacy during dating relationships. No other studies have been published to date.

A more detailed picture of how implicit family process rules affect adolescents within the family system is intended. It is posited that the more facilitative family process rules will predict fewer negative psychological symptoms in adolescents. This study will inform future research in adolescent development and family functioning and will contribute to a greater knowledge base from which family therapists can draw to improve diagnostic and therapeutic interventions when working with adolescents and their families.

#### *Rationale for Study*

Family rules may be assessed and are amenable to change (Satir, 1988). By understanding the impact that facilitative/functional and constraining/dysfunctional (Harper, Stoll, & Larson, in press) family process rules have on family members, practitioners can develop a more focused treatment model for adolescents exhibiting negative psychological symptoms. Not only can the understanding of how healthy and

unhealthy implicit family rules influence the direct focus of treatment for adolescents and their families, but that understanding also carries important implications for preventive family life education. An awareness of the importance and function of facilitative implicit family process rules in the development of psychologically healthy children and adolescents will benefit parents as well as therapists and family life educators invested in raising psychologically healthy children. The avoidance or timely treatment of psychological symptoms related to family rules early on should help to improve adolescents' functioning in current and future relationships such as dating, courtship, and marriage (Larson, Taggart-Reedy, & Wilson, 2001).

Little research has been done specifically looking at implicit family process rules. Using the Family Implicit Rules Profile (FIRP), Gillett (2003) found that families with eating-disordered teens and young adults exhibit less facilitative and more constraining implicit family process rules than non-eating disordered teen families. This supports previous research that focused on the relationship between family dynamics and eating disordered behavior in adolescents (Bailey, 1991; Haworth-Hoepfner, 2000; Herzog, et. al., 2000). Another study (Stoll, 2004) found that the clinical and non-clinical families score differently on all scales of the Family Implicit Rules Profile was a valid and reliable instrument in whether families are considered clinical or non-clinical. Stoll (2004) further determined that non-clinical families were less influenced by constraining implicit family process rules and more influenced by facilitative family process rules. The difference between clinical and non-clinical families was determined not to be the result of life circumstances, but rather the implicit family rules that guided the families approach to



communicating and resolving problems and dealing with life circumstances more effectively in order to achieve more favorable outcomes.

While a number of clinicians and researchers in family therapy have discussed the dysfunctional rules commonly observed in alcoholic family systems (Larson, Taggar-Reedy, & Wilson, 2001) and eating disordered teen families (Gillett, 2003) or in clinical families in therapy (Stoll, 2004), very limited research has been conducted on adolescents' perceptions of such dysfunctional or constraining rules and the negative impact of such rules on adolescent psychological health or symptomology. Furthermore, the relationship between more functional, facilitative family rules and adolescent psychological health makes sense conceptually but has not been tested empirically. This gap in research indicates an area of great value to future adolescent and family developmental theory and research as well as family therapy and pleads for exploration and study.

### *Theoretical Context*

The overarching theoretical context for studying family rules is family systems theory (Nichols & Swartz, 1998). Family systems theory stems directly from General Systems Theory and suggests that the family interaction environment significantly affects the individual development of children and adolescents (Nichols & Schwartz, 1998). Two primary concepts of family systems theory that relate to understanding family rules are the concepts of mutual causality and feedback loops (Goldenberg & Goldenberg, 2004).

Mutual causality refers to the belief that no single part or individual in a system can organize or control the whole system, but rather it is through the reciprocal influence of the interaction of those members as a whole that family rules begin to form

(Goldenberg & Goldenberg, 2004). This is unlike more traditional cause and effect explanations of linear thinking where “A” is said to cause “B” is said to cause “C”. Instead, mutual causality means “A” “B” and “C” affect each other evenly without one individual part being able to manipulate the system by itself (Becvar & Becvar, 1996, Gillett, 2003).

Feedback loops are the second concept used to understand family rules. Feedback is what allows the system member to know the effects of her/his behavior on others and, therefore, functions as a self-corrective mechanism (Becvar & Becvar, 1996). Two types of feedback loops exist: positive and negative. These concepts of positive and negative feedback loops do not suggest value judgments of good and bad but rather of change or no change. Positive feedback loops refer to a change that has occurred and has been accepted by the system while negative feedback indicates that the status quo has been maintained. The goodness or badness can only be qualified relative to the existing context (Becvar & Becvar, 1996). A family system functions according to feedback processes and is constantly correcting its members in order to maintain homeostasis or its comfort level. It is within the context of these feedback loops and the need to maintain the status quo that families develop repetitive patterns and rules that influence individual family members. These patterns are maintained by both explicit and implicit family rules which are developed in order to keep the family safe, maintain homeostasis, and in its comfort zone.

Three other family systems concepts are directly related to family rules: affective responsiveness, affective involvement and behavioral control. The concept of affective responsiveness finds itself in the middle of implicit family process. Affective

responsiveness is defined as the family's ability to respond to events with appropriate quality and quantity of emotional expressions (Epstein et al., 1993). Thus, implicit family process rules such as: "Be kind and compassionate;" "Be in control of yourself at all times;" "Give others a chance to speak;" and "Be careful to say the right thing when you offer your opinion" directly influence and demonstrate the connection between both facilitative and constraining implicit family process rules and affective responsiveness.

Mcord (1991) followed 201 male children for thirty years and found that the mother's affective responsiveness was a significant variable in whether or not male children became involved in criminal behavior. Extreme levels of affective responsiveness (both high and low) within the family have been shown to indicate relapse after hospital discharge for patients with psychological symptomology (depression, alcoholism, adjustment disorder, bipolar disorder) (Friedman et al. 1997). Moreover, when clinical families were compared to non-clinical families, they were consistently rated lower on constructs related to affective responsiveness.

Outcome research delineates between clinical and non-clinical families on affective responsiveness. Understandably, implicit family process rules would also underlie affective responsiveness. In non-clinical families these rules might be verbalized as: "Be affectionate;" "Be sensitive to others;" "Express what you think and feel;" "Don't call each other hurtful names;" and "Be friendly." In clinical families these implicit rules directing affective responsiveness might be verbalized as: "Don't get close to people;" "Never upset your father/mother by expressing your feelings;" "If you can't say something nice don't say anything at all;" "Protect your mother/father emotionally even

if you have to sacrifice yourself;” or “Listen to a parent when they need to complain about the other parent.”

Affective involvement is another family system term that has been defined as the amount of interest and manner in which interest and investment is shown in the family (Epstein et al., 1993). Hawkins and associates (1997) and Aseltine (1995), established that low investment of affect was associated with substance abuse and delinquency in adolescence. It was also found that extreme affective involvement (e.g. enmeshment) is associated with problems of depression and anxiety (Barber & Buehler, 1996), and that strong affective responsiveness (cohesion) is associated with psychological health and the lower occurrence of depression and anxiety (Barber & Buehler, 1996).

It follows that as with affective responsiveness, implicit family process rules also may directly affect affective involvement. Rules such as: “Stand up for others in the family;” “Show physical affection in the family;” “Share the happenings of your day with family members;” “Give others a chance to speak;” and “Entertain others views and opinions,” would indicate facilitative affective involvement. Constraining rules such as: “Be careful to say the right thing when you offer your opinion;” “Don’t be yourself;” “Don’t trust others, including family members;” “Be someone you are not, rather than be who you are;” “Act good, right, strong, or perfect;” “Lie if necessary to keep family secrets;” “What your father/mother doesn’t know won’t hurt them;” and “Don’t mess up,” would be related to less affective involvement. By looking closely at such family theory constructs as affective responsiveness and affective involvement, we can see that implicit family process rules may be active in shaping outcomes in adolescent psychological well-being.

Epstein et. al. (1993) also discusses behavioral control as a major family system concept that relates to the family rule of monitoring. Behavioral control refers to patterns of behavior that a family uses for dealing with family situations. In other words, families develop behaviors for dealing with family circumstances, such as conflict. Four styles of behavioral control in families have been identified (Epstein et. al., 1993).

Families with a rigid style of behavior control are inflexible and leave little room for negotiation or change. Individual members are forced to conform or agree to a set way of doing within the family. Flexible families stand in contrast in that they adapt and adjust their family roles and rules according to changing family situations. The laissez-faire style of behavioral control is one of “anything goes” and these families have few rules or standards to guide their interactions. Last of the four types are chaotic families. These families tend to jump back and forth between behavioral styles and have no consistent rules or roles to dictate their behavior. Each behavioral style influences how much a family adapts to changing family situations. It then stands that the amount of control family members feel they have influences how they react to different family situations. Of the four styles, flexible is considered the most effective for healthy family interaction and would stand as the most facilitating parenting style for creating healthy monitoring process rules in families.

#### *Variables for Theoretical Model*

Five variables or psychological symptoms that may be most closely related to implicit family process rules were chosen to be the focus of this study. The first psychological symptom is interpersonal sensitivity. Derogatis and Melisaratos (1983) define interpersonal sensitivity as an indication of feelings of personal inadequacy and

inferiority and that it is manifest by self-deprecation, feelings of uneasiness, and marked discomfort during interpersonal interactions. The second symptom is depression.

Depression is reflective of a broad range of signs and symptoms of the clinical depressive syndromes and is manifested by a withdrawal of interest in life activities, loss of energy, symptoms of dysphoric affect and mood, as well as feelings of hopelessness. (Derogatis & Melisaratos, 1983). Third, anxiety was included which comprises: restlessness, nervousness, and tension as well as feelings of panic (Derogatis & Melisaratos, 1983). Fourth, somatization refers to psychological distress arising from perceptions of bodily dysfunction manifest as physical complaints. Derogatis and Melisaratos, (1983) elaborate on somatization as having complaints typically focused on cardiovascular, gastrointestinal, respiratory, and other systems with strong autonomic mediation. The fifth variable included is hostility which according to Derogatis and Melisaratos (1983) includes three dimensions: thoughts, feelings, and behavior. Also included is feelings of annoyance and irritability, urges to break things, frequent arguments and uncontrollable outbursts of temper.

Implicit family process rules are categorized as constraining or facilitating rules. Harper and Hoopes (1991) define constraining family process rules as constraining thoughts and feelings of self. For example “Meet others expectations even if it’s not a good thing for you”. They further divide facilitative family process rules into three subcategories: Kindness, Expressiveness and connection, and Monitoring. Facilitative family process rules that fall under the Kindness subscale include: “Be sensitive to others;” “stand up for others in your family;” “be gentle with others;” and “be flexible enough to entertain others views and opinions.” Rules that encourage expressiveness and

connection include: “Support each other;” “Share your feelings;” “Show physical affection within the family;” and “Express what you think and feel”. Similarly, Monitoring rules comprise such rules as: “Get input from other family members about major decisions in your life”.

Facilitative implicit family process rules help build adolescent self esteem and a more positive and healthy self image which helps contribute to nourishing interpersonal relationships. It is expected then that facilitative family process rules will be a safeguard against psychological symptoms such as: interpersonal sensitivity, depression, anxiety, somatization, and hostility. Likewise, constraining family process rules should be related to the presence of such symptoms. The general hypothesis for this study is that more facilitative implicit family process rules will be related to fewer adolescent psychological symptoms.

## Chapter II

### Review of the Literature

This review of the literature is broken down into five areas: (1) a current overview of adolescent mental health and specific family variables; (2) general family functioning and parenting styles and adolescent outcomes; (3) an overview of implicit family process rules; (4) how implicit family rules affect family process; and (5) how implicit family process rules influence the development of psychological symptoms.

#### *Adolescent Mental Health and Family Functioning*

Research investigating family factors that contribute to adolescent mental health is not new. There are numerous studies linking disordered family functioning to a wide range of mental health problems in children and adolescents (Asarnow et al., 1987; Kashani et al., 1995; Kaslow et al., 1984; Kaufman, 1991; McCauley et al., 1993; Puig-Antich et al., 1993; & Tamplin, et al., 1998). The importance of family interaction with regards to the development of behavioral problems in children and adolescents, and that the family is an important factor that can either cultivate or impede pathology, is well accepted. (Dekovic, Janssens, & Van As, 2003). It has been consistently demonstrated through research that having a family member with a mental illness associated with poor family functioning (Tamplin & Goodyear, 2001). Characteristics such as conflict, lack of warmth, hostility, poor acceptance, and poor family cohesion have been identified as leading factors in adolescents developing internalized behavior problems (Millikan, et al., 2002). Asarnow and colleagues (1987) found that children who are depressed and have attempted suicide report their families as unsupportive and stressful, with high conflict



and low control. Also, Mathijssen, Koot, Verhulst, De Bruyn, & Oud (1998) found that poor mother-child relations predicted externalizing behaviors in adolescents.

One of the most frequent reasons that adolescents are referred for psychological treatment is clinical depression (Burns, et. al., 1999; Cicchetti & Toth, 1998; Santrock, 2001). It is estimated that depression increases in adolescents to approximately twice the prevalence as in the elementary school years (Conger & Chao, 1996). Studies have established that approximately one-third of adolescents who are referred for treatment suffer from depression (Fleming, et al., 1993).

Because adolescence is such a tumultuous period of evolution and change for individuals, depression and other psychological symptoms are often not detected but rather referred to as normal adolescent process (moodiness). It is felt by mental health professionals that depression most often goes undiagnosed in adolescence (Burns, et. al., 1999; Cicchetti & Toth, 1998; Santrock, 2001). Depression in adolescence, however, can not be explained as part of normal developmental process as it has been shown through follow-up studies that the symptoms of depression experienced in adolescence predict similar problems in adulthood (Garber, et al., 1998). This means that adolescent depression does not go away on its own and needs to be taken seriously. Depression has also been shown to lead to other psychological presentations or outcomes such as anxiety, anger, distorted body image, assault and suicide (NIMH, 2000; Tomlinson-Keasey, et al., 1986; Windle & Dumenci, 1998; Wright, 1989; Vernberg, 1990).

Many factors are related to depression in adolescence. Having a depressed parent or a parent who is emotionally unavailable, immersed in marital conflict, and family strain including severe economic problems has been shown to increase the likelihood of

depression in adolescents (Demuth & Brown, 2004; Reinherz, 2000; Santrock, 2001). Adolescents with depression may have parents with a tendency to be overprotective (Johnson, 1986; Nilzon & Palmerus, 1997). Other studies relate adolescent depression and suicide with frequent parental absence (Demuth & Brown, 2004; Johnson, 1986; Stack, 1985). Depressed adolescents are three times more likely to have a family member with depression as adolescents who are not depressed (Rice & Dolgin, 2002). It might be said that depression runs in families and is directly influenced by family style and rule patterns.

Major depressive disorder is 1.5-3 times more common among first-degree biological relatives of people with depression and is found in 10 to 25 percent of women as opposed to 5-12 percent for men (DSM-IV-TR, 2004). Some of the reasons proposed for this split in gender representation is that: girls might ruminate in their depressive mood and thus amplify it; females' self images, especially their body images, are more negative than for males; and females face more discrimination than males do (Mintz & Betz, 1986; Santrock, 2001). Possibly for the same reasons, anxiety is also more often reported by females than by males. This is not surprising given that Generalized Anxiety Disorder frequently co-occurs with mood disorders such as depression (DSM-IV-TR, 2004). The DSM-IV-TR, (2004) reports that roughly 60 percent of those presenting with anxiety are female.

Girls are also more likely to somaticize. Somatization indicates the presence of physical symptoms that suggest a medical condition and are not fully explained by a medical condition. The DSM-IV-TR (2004) describes somatization as being

“characterized by a combination of pain, gastrointestinal, sexual, and pseudoneurological symptoms.”

Conversely boys are more likely to “act out” rather than “in.” Most adolescent delinquents are male, and a high number come from divorced families (Cernkovich & Giordano, 1987; Demuth & Brown, 2004; Johnson, 1986; Steinberg, 1999). The DSM-IV-TR (2004) reports that irritability and problems with conduct often occur in children or adolescents with a mood disorder and are higher in males than in females. This indicates that depression and anxiety in boys is coped with differently than with girls. Miller (1994) states that men tend to act out (e.g. conduct disorder), and women act out by “acting in” (e.g. depression). One reason may be that men are socialized in a way that makes repressing feelings the norm. It is reported that one of the most prevalent reasons adolescent females seek treatment is for sadness and depression, while adolescent males are more likely to be referred to treatment for truancy or issues of conduct, both of which are related to feelings, thoughts and behaviors that are hostile (Reinherz, 2000; Santrock, 2001).

#### *General Family Functioning, Parenting, and Adolescent Psychological Symptoms*

General family functioning has also been studied in respect to adolescent psychological health. The Circumplex model developed by Olson, Russell, and Sprenkle (1979, 1983) proposes a system of classifying functional and dysfunctional families on the dimensions of cohesion, adaptability and communication. Cohesion refers to the emotional bonding that family members feel toward one another and is measure along a four-level continuum: disengaged, separated, connected, and enmeshed. Adaptability is defined as the ability of a family system to change its power structure, role relationships,

and relationship rules in response to stress. The four levels of adaptability are: rigid, structured, flexible, and chaotic. The third dimension in Olson's model, communication, is what facilitates movement toward end maintenance of balance between cohesion and adaptability. Open communication between family members facilitates a balanced level of cohesion and adaptability. Extreme levels of cohesion and adaptability are indicative of dysfunction family interaction while moderate levels indicate healthy family functioning.

According to the Circumplex model of family functioning, communication is the glue that holds the family together (Masselam & Marcus, 1990). Communication between adolescents and their parents presents some special problems, stresses, as well as opportunities compared with parent-child communication at other stages of the life cycle (Olson, et al. 1983; Carter & McGoldrick, 1999). It is at this stage in the life cycle that one is most likely to hear complaints about poor parent-child communication (Masselam & Marcus, 1990). Using the Circumplex model, McCord (1991) found that adolescent delinquent behavior was related to family cohesion and they recommend that family cohesion can be an important indicator of adolescent delinquency.

Much of the research about family affect and adolescent outcomes has focused on parenting styles. Diana Baumrind (1978) established four distinct styles of parenting based on the concepts of parental responsiveness and parental demandingness. These four styles are made up of various combinations of parental responsiveness and demandingness and are: authoritative, authoritarian, indulgent, and indifferent. Generally speaking adolescents raised in authoritative homes are more responsible, self assured, adaptive, creative, curious, social, and successful in school. By comparison, adolescents

raised in authoritarian households are more passive, dependent, less socially adept, less self assured, and less intellectually curious. Adolescents raised in indulgent homes are often less mature, more irresponsible, more conforming to their peers, and less able to assume leadership roles, while adolescents raised in indifferent households are more impulsive and likely to be involved in delinquent behavior and to experiment with sex, drugs and alcohol (Fulgini & Eccles, 1993; Kurdek & Fine, 1994; Lamborn et al., 1991; Steinberg et al., 1994).

Authoritative parenting is made up of three main components: warmth (the degree to which the adolescent is loved and accepted), structure (the degree to which the adolescent has expectations and rules for his/her behavior), and autonomy support (the degree to which parents accept and encourage the adolescent's individuality) (Barber, 1994; Steinberg, Elmen, & Mounts, 1989). Parental warmth has been linked to adolescent overall competence; the presence of structure is associated with fewer behavior problems; and autonomy support is connected to fewer symptoms of psychological distress, such as depression and anxiety (Barber, Olsen, & Shagle, 1994; Herman et al., 1997; Steinberg, 1990).

Family functioning and parenting style, then, can be directly linked to rule development and adolescent functioning (Bloom, 1985; Olson, Russell, & Sprenkle, 1983; Smetana, 1995). One study (Dekovic, et al., 2003) showed that parent-child interaction was a significant predictor of antisocial behavior in adolescents. These results were independent of other proposed factors such as: community, SES, characteristics of parents, and family characteristics. This supports the theory that family rules, or rules around family interaction, may play a significant role in the development of adolescent

mental health. The intricacies of such family rules, however, have not yet been fully explored.

### *Implicit Family Process Rules*

The use of implicit family process rules in the study of adolescent psychological well being is uniquely different from parenting styles or general family functioning in a couple of ways. First, implicit family process rules are by nature not openly acknowledged or consciously understood by the family system without increased awareness. This means that even though family process rules serve to regulate how the family system functions (Blevins, 1993) the family is generally rather unaware of the implicit nature of how they affect and regulate the family system. Second, implicit family process rules usually are not explicitly developed by parents and directed to adolescents and therefore are not linear in their creation. The mutual causality of rule formation implies that all members of the family system play a part in the creation of how the family regulates itself based on feedback from the familial environmental input. For example, parents with an authoritarian parenting style may impose an explicit boundary on an adolescent such as a curfew of 10:00 pm on the weekend. How the adolescent responds may depend on the implicit family process rules that are created in response to this more explicit rule. The implicit family process rule to take care of the family system by always adhering to the curfew, or challenging the curfew only when dad is out of town, or secretly sneaking out of the house without the parents knowledge and lie about it, or directly confronting the rule and asking for a latter curfew are more implicit, mutually determined family rule. This is different from more conventional linear rules in

families, and implies a more circular process wherein family members mutually influence each other.

Implicit family process rules have been identified as an important part of the family social environment in which adolescents develop and are believed to have particular impact on healthy adolescent mental health (Ford, 1983). These implicit rules are defined as the unwritten guidelines that govern family interaction (Ford, 1983; Blevins, 1993). These unwritten rules are seldom explicitly communicated to family members, yet are just as potent in shaping and determining how a family functions as explicit or written rules (Blevins, 1993). In reviewing the empirical literature, three areas are explored on implicit family process rules: 1) the characteristics and functions of implicit and explicit family rules in family process; 2) empirical support for the role of family process and implicit family process rules in the development of psychological symptoms in offspring, and 3) how adolescent gender is related to implicit family process rules and the presentation of psychological symptoms.

#### *Family Rules in Family Process*

The empirical literature on implicit family process rules remains in its early stages; however, there is an established foundation of theoretical and clinical literature on how family rules are related to family process (Stoll, 2004). Family rules are an integral part of overall family process (Jackson, 1965; Becvar & Becvar, 1996; Nichols & Schwartz, 1995; Broderick, 1993). Hoopes & Harper (1987) state: “The maintenance of balance or survival of the structure is one purpose or goal of the family rules” (p.5). Satir (1988) also asserts that: “Rules contribute to relational self definition, relational development, and relational satisfaction” (p.168). Because rules regulate how the system

functions, the appropriateness and logic of the family rules significantly affect family and individual mental health (Blevins, 1993). Recognizing the powerful force of implicit rules in alcoholic families, Nuechterlein (1983) maintains that “family rules determine behavior to a greater degree than individual needs, drives, or personality characteristics” (p.58).

Family rules have many characteristics. According to Ford and Herrick (1974), “family rules have the dimensions of repetition and redundancy” (p.62). This means that family rules can be inferred from repeated observations of family process. It also indicates that through observing family interactions over time, family behavior not only becomes more understandable, but predictable as well. Family rules begin by proscribing and limiting behavior and over time further prescribe what is necessary (Ford & Herrick, 1974). A rule such as “Don’t say what you feel” may begin as an indication of what is forbidden but over time becomes a statement of what is expected (Stoll, 2004). In this way family rules are vital, dynamic, and extremely powerful, becoming autonomous and perpetuating themselves (Blevins,1993; Ford & Herrick, 1974; Satir, 1988).

In contrast to the more easily recognizable explicit rules, implicit rules of family process are neither clear nor openly communicated, yet they are typically followed by all family members (Blevins, 1993; Broderick, 1990; Hoopes & Harper, 1987; Nichols & Schwartz, 1995; Satir, 1988). “These rules make up a powerful, invisible force that moves through the lives of all members of families” (Satir, 1988 p.169). Due to the implicit or covert way in which these rules are communicated, they often remain out of the direct awareness of family members until they are explicitly and overtly presented to



family members. Once the implicit has been made explicit family members are, by and large, able to recognize them.

An example of constraining implicit family process rules is frequently found in alcoholic families. There is often a family rule about not mentioning the alcoholism (Steinglass, 1987). There are often further family rules which stipulate, “Don’t talk,” “Don’t trust,” and “Don’t feel” (Black, 1981). These additional rules strongly support the initial rule of denying the alcohol problem. Because of the implicitness of some rules they are often out of conscious awareness of family members and there may even be rules about not acknowledging implicit rules. This makes implicit family rules powerful self-perpetuating forces in family process that are not always easily amenable to change (Blevins, 1993; Ford & Herrick, 1974). Family members are likely socialized into following these rules by verbal and non-verbal cues. So, if a family member broached the subject of alcoholism or even expressed a feeling too directly, other family members might punish this behavior through a scowl, becoming angry, or ignoring the expression altogether (Stoll, 2004). These implicit family process rules then become entrenched in the family over time and serve to direct the family as to what is both forbidden and expected, thus maintaining family homeostasis.

Broderick (1990) states: “All rules, by definition, serve to regulate the flow of interchanges in the system” (p.186). Hoopes and Harper (1992) specify that “family members develop rules that regulate the expression of emotions, trust, intimacy, dependency and autonomy in all relationships” (p.5). This allows for families to perform the necessary functions of daily life such as finding acceptable ways to express anger, deciding which parent to ask to borrow the car, and knowing when, where, and how, to

discuss questions about sex. Implicit rules become known through consistent behavior patterns that are reinforced or punished. This supports the family system in preserving its status quo or homeostasis (Stoll, 2004).

Another characteristic of family rules is that they set limits on cohesion and communication within the family (Barber & Buehler, 1996). Children may learn that physical and emotional closeness are to be found only within the family and that everyone else, even friends, are outsiders to be kept at a distance. Another family may establish cohesion differently, they may show little or no concern for dealing with family issues, thus indicating that struggles or problems be taken elsewhere and dealt with outside the family (Stoll, 2004).

Family rules also act to express the values of the family system (Becvar & Becvar, 1996; Blevins, 1993). For example a family that values the inherent worth of each family member may have the facilitative rule: “Encourage others to share their feelings” whereas a family which fears conflict may have the constraining rule: “Don’t identify, talk about, or solve problems” (Stoll, 2004).

Additionally, rules alter or amend the expression of intimacy (Ford, 1983). Galvin and Brommel (1982) assert that “family members may touch each other or share personal information in ways that do not exist in other relationships” (p.43). Satir speculates: “How much of the truly satisfying, nurturing potential of affection among family members is not enjoyed because family rules about affection get mixed up with taboos about sex” (p.172). All families have rules that dictate, both verbally and physically, emotional closeness and affection. Examples of such facilitative rules include; “Be affectionate with members of the family;” and “Be kind and compassionate.”

Because all families have rules that govern individual and family behavior, the appropriateness, logic, and flexibility of family rules are vital to the health of both the family system and individual family members (Blevins, 1993; Harper & Hoopes, 1992; Ford, 1983; Galvin & Brommel, 1982). Whether a rule is thought of as facilitative or constraining depends on several factors. Facilitative family rules are: attainable, promote openness, confirm all members intrinsic self worth and dignity, encourage unconditional love, serve the entire family, allow difference, and function as learning tools that help members of the family to discover appropriate, functional and acceptable behaviors (Blevins, 1993). Examples of facilitative family process rules are: “Be open with each other;” and “stand up for others in the family.” In reference to facilitative family rules, Satir (1988) alleges that: “The family whose rules allow for freedom to comment on everything, whether it be painful, joyous, or sinful, has the best chance of being a nurturing family” (p.173). Hoopes and Harper (1992) describe facilitative family rules as those that enable everyday tasks to get accomplished, provide emotional support, and encourage intimacy, dependency and autonomy. “When healthy families have healthy rules, family members know the expectations and experience freedom by living within the structure of their family rules” (Nuechterlein, 1993, p.60).

Constraining family rules, in contrast, produce “dis-ease” among family members (Blevins, 1993). Constraining family rules stipulate ways of thinking, feeling, and behaving that create shame and maintain dysfunction in families (Nuechterlein, 1993; Harper & Hoopes, 1990). Examples of constraining family process rules are: “Be careful to say the right thing when you offer your opinion;” and “Meet others’ expectations even if it is not good for you.” Nuechterlein (1993) maintains that constraining family rules

dictate people's behavior and emotions; whereas, facilitative rules serve as guidelines for people's lives. Constraining rules keep people trapped in roles of who they "should" or "should not" be (Satir, 1998). Constraining rules produce rebellion and chaos, impede emotional growth and development, interfere with communication, fragment relationships, result in alienation and hostility, inhibit getting personal needs met, and otherwise interfere with familial and personal growth (Blevins, 1993). Because living up to constraining rules is impossible, family members develop low self esteem, a poor sense of identity, and inappropriate boundaries (Nuechterlein, 1993).

To summarize, implicit family process rules are created through repeated interactions in the family system. They are generally communicated implicitly and yet are understood and followed by all family members. Rules help balance the family system by governing the range of behaviors the family system can tolerate. Characteristics of family rules include: regulation of family functioning in order to provide predictability and stability; managing cohesion; guiding communication; communicating family values; regulating intimacy; and otherwise clarifying and establishing boundaries for the family system. This rule system can be recognized as either facilitative or constraining, with each rule contributing an element of growth or atrophy to the overall family system and its members (Stoll, 2003).

#### *Family Process Rules and the Development of Psychological Symptoms*

Empirical support for family rules as an influence in the development of psychological problems of family members is just beginning to emerge. It has been shown that constraining family rules may decrease the ability to establish intimacy during dating relationships due to the activation of the constraining rules in the context of

relationship development in young adulthood (Larson, et. al., 2001). Gillett (2003) was able to show that families with an adolescent with an eating disorder exhibit less facilitative family rules and more constraining family rules than non-eating disordered families. It was postulated that most of the constraining family rules in eating disorder families revolved around control.

Stoll (2004) found that non-clinical families, (families who did not have a child enrolled at an adolescent residential treatment center) were less influenced by constraining rules and more influenced by facilitative rules. It was suggested that clinical and non-clinical families face basically the same problems and stresses in life, but that the rules that guide the family's approach to working out those problems are different and, thus, produce different outcomes. Stoll (2004) reported that the families that had adolescents in treatment for substance abuse and delinquency problems showed a high relationship with the presence of constraining family process rules and a lesser presence of facilitative family process rules in problem solving, especially around emotional issues that appear to be directed by implicit family process rules. Such emotional issues would include things like which parent to side with in arguments or if it is ok to express or show emotion in certain situations or with particular parents or family members.

*The Roles of Gender, Family Status, and Treatment Status on Perceptions of Rules and Symptoms.* Andrus-Parks (1998) examined gender differences in the perception of constraining implicit family process rules and determined gender was a significant factor in how young adult participants responded. Using the Family Rules from the Past (FRP) questionnaire she found that males, consistently and significantly on both total scores as well as subscale scores, scored higher than females on a measure of

constraining family rules. This implies a potential greater negative impact of constraining implicit family rules on males compared to females (Andrus-Parks, 1998). Stoll (2004), found no significant gender differences in adolescent perceptions of family rules for the kindness rules measure, a constraining thoughts, feelings and self measure, inappropriate caretaking of parents measure, and a family monitoring measure. Thus, while the Andrus-Parks study suggests that young adult males perceive constraining family process rules more negatively overall, Stoll found that adolescent males perceive family process rules more negatively than female adolescents only on rules related to expressiveness and connection. This may indicate that male adolescents perceive fewer positive rules about the open expression of feelings and intimate connection with family members than females, thus suggesting that males, partially through the process of rules, may be socialized differently than females to expect and engage in lower levels of emotional expression and connection within the family.

Possible explanations of these gender differences in perceptions of implicit family process rules may be a result of the differential socialization of males and females such as: (a) the relative discouragement of both verbal and non-verbal expression of emotion for males compared to females; (b) increased emphasis for males to be more rational, in control, instrumental and competitive than females; and (c) different developmental paths where boys are encouraged to move toward individuation while girls are encouraged to move toward affiliation and attachment (Benenson, 1996; Gilligan, 1982; Levant & Pollack, 1995; Pollack, 1998; Tannen, 1990).

The process of such socialization for males and females in families may be sustained and guided by implicit family process rules. Therefore, constraining rules such

as: “Don’t feel or talk about feelings;” “Don’t identify, talk about or solve problems;” “Be in control of yourself at all times;” “Rather than be who you are, act strong, right, or perfect;” “Rely on yourself and not other family members;” and “Don’t get close to others” are likely to be found driving the gender difference results found above (Stoll, 2004).

Research suggests that boys are less encouraged to care for others (Dienhart & Daly, 1997; Levant & Pollack, 1995) while girls are more inclined toward a caring regard for others and relationships which is encouraged through more experience with supportive conversations (Dienhart & Daly, 1997). If true, then implicit family process rules about expressiveness and connection may be a fundamental means in establishing such separate dynamics.

Cross and Madsen (1997) proposed that males in western culture are thought to construct and maintain a more independent self-construal, whereas women are thought to construct and maintain a more interdependent self-construal. That is to say, that girls are more likely to become aware of who they are through their relationships with others, while boys find out who they are more independent of others. While this hypothesis has rival views (Martin & Ruble, 1997) and remains somewhat controversial, the literature overwhelmingly points to differences in gender behavior and socialization patterns.

Adolescence has been established as a time when both males and females move toward autonomy from their parents (Erikson, 1964). However, differences have been found in the way each gender achieves this task. For example boys are reported to be behaviorally dependent for a longer stage than girls at the same time achieving emotional autonomy at a much faster rate than girls (Carter & McGoldrick, 1999). This implies that

independence is a more important concern for boys than it is for girls and that parental expectations may serve to reinforce these differences (Carter & McGoldrick, 1999, Gilligan, 1982).

Culturally defined gender role expectations play a critical part in adolescents' pursuit of life goals. Families have traditionally given males greater support for educational and occupational advancement, independent living, and financial self-sufficiency (Carter & McGoldrick, 1999). It fits that implicit family rules would follow suit and support these same traditional family expectations such as males would not be expected to express their feelings or connect to others while females would be expected to connect to others and express emotion within the family. Therefore it stands that there may be different rules for males than for females, and that these rules may also be viewed or internalized differently for females and males. Gender may also be compulsory in considering how symptoms are reported. Considering the Andrus-Parks (1998) findings that gender was a significant factor in perceptions of constraining family rules, and Stoll's (2004) finding that males perceived family rules about being expressive and connected with others more negatively than females, gender influences are considered in the proposed model of family rules and adolescent mental health. This makes gender a complex and valuable variable to explore when assessing implicit rules in families.

Family status may also be related to reports of psychological symptoms. The accumulated research suggests that marital dissolution has a high potential effect of creating emotional turmoil in adolescents' lives (Amato, 2001, 2000, 1997). This means adolescents from non-intact families (divorced) are more likely to report psychological symptoms than adolescents from intact (never-divorced) families. Amato (2001)



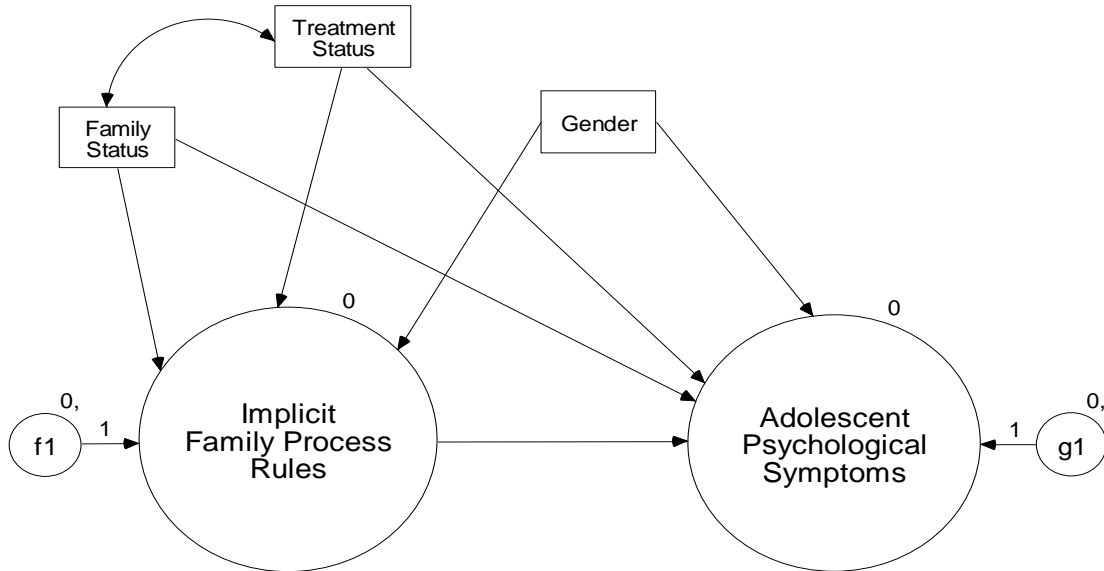
conducted an extensive meta-analysis and found that the strongest predictors of psychological maladjustment for adolescents were found in single parent families where divorce had occurred. This renders Family Structure as an important and interesting variable to include in the model.

Whether a family was in treatment or not (treatment status) has also been shown to be a significant indicator of types of implicit rules in families. Non-clinical families report less constraining rules and more facilitative rules than clinical families. This was shown through outcome studies showing that eating disordered families have a strong tendency toward constraining family process rules, especially those dealing with power and control in the family (Gillette, 2003, Stoll, 2004). It also was shown that constraining family rules are related to young adult problems in establishing intimacy in their dating relationships (Larson, Taggart-Reedy & Wilson 2001). Thus, it may be that constraining rules are also related to the psychological symptoms of anxiety, depression, interpersonal sensitivity, and hostility.

*Summary and Model.* In summary, implicit family process rules are an integral part of overall family process and are created through repeated interactions in the family system. They are generally communicated implicitly and yet are understood and followed by all family members. Rules help balance the family system by governing the range of behaviors the family system can tolerate. The family rules can be recognized as either facilitative or constraining, with each rule contributing an element of growth or deterioration to the overall family system and its members.

More specifically, the hypothesized theoretical model for the current study is represented below in Figure 1.

Figure 1  
Theoretical Model



The relationship of each class of implicit family rules, including Expressiveness, Kindness, Monitoring, and Constraining to the latent variable Implicit Family Process Rules was tested in this model. Similarly, the relationship of each psychological symptom, including Hostility, Interpersonal Sensitivity, Depression, Anxiety and Somatization to the latent variable of Adolescent Psychological Symptoms also was tested. The model suggests that the latent variable of implicit family process rules predicts the latent variables of psychological symptoms in adolescents. The model also posits that family status (intact or non-intact families); treatment status (in treatment or not in treatment) and gender are related to implicit family process rules and adolescent psychological symptoms. More specifically, it was expected that, compared to males,

females would report more psychological symptoms and more facilitative family process rules than males. The relationship between Family Status and Treatment Status and implicit family process rules and psychological symptoms was examined. More specifically, adolescents from non-intact families as well as adolescents from families in treatment were expected to report more psychological symptoms and fewer facilitative implicit family process rules.

In previous studies (Stoll, 2004; Gillette, 2003) it was established that a fifth implicit family process rule, inappropriate caretaking of parents, may exist in families but its accurate measurement has not yet been established. Of all the FIRP subscales, this one has the lowest internal consistency reliability and lowest test-retest reliability. Furthermore, scores on the inappropriate caretaking subscale were not highly correlated with the overall FIRP. The dynamics of inappropriate caretaking are more subtle than other types of family process rules, making them more difficult to identify and measure (Stoll, 2004). Thus, it was decided not to include inappropriate caretaking as a variable in the proposed model.

## Chapter III

### Method

#### *Sample*

This study included two adolescent samples: a treatment (clinical) sample and a non-treatment (non-clinical) sample. Two samples were used in order to provide a wider demographic range of adolescents and families. The more heterogeneous sample further allowed for an examination of the relationships between treatment status, family process rules and psychological symptoms. For the purpose of this study, treatment adolescents were defined as those enrolled in an inpatient wilderness therapy program for the treatment of behavioral and mental disorders. Participation in the study occurred while adolescents were in treatment. Non-treatment adolescents in this study were defined as those living at home, who had not ever received any kind of psychological treatment for a behavioral or mental disorder.

The total sample size was 243 adolescents, (144 in the treatment group and 99 in the non-treatment group). Table 1 describes the sample in terms of age, gender and treatment status of the adolescents.

Table 1  
Sample Size, Age and Treatment Status by Gender (n=243)

| <b>Gender</b>  | <b>Sample Total</b> | <b>Clinical</b> | <b>Non-clinical</b> | <b>Mean Age (SD) Range</b> |
|----------------|---------------------|-----------------|---------------------|----------------------------|
| <b>Females</b> | 93                  | 49              | 44                  | 15.6<br>(1.3)              |
| <b>Males</b>   | 150                 | 95              | 55                  | 15.7<br>(1.2)              |
| <b>Total</b>   | 243                 | 144             | 99                  | 15.7<br>(1.2)              |
| <b>Age</b>     | <b>Years</b>        | <b>Clinical</b> | <b>Non-clinical</b> | <b>Total</b>               |
|                | <b>13 yrs</b>       | 2               | 13                  | 15                         |
|                | <b>14yrs</b>        | 15              | 21                  | 36                         |
|                | <b>15yrs</b>        | 26              | 17                  | 43                         |
|                | <b>16yrs</b>        | 48              | 22                  | 70                         |
|                | <b>17yrs</b>        | 53              | 25                  | 78                         |
|                | <b>18yrs</b>        | 0               | 1                   | 1                          |

Subjects (male and female) were about 15.5 years of age, and there were more males than females in the study. In fact, there were almost twice as many clinical males in the sample than any other type of participant. Table 2, describes the sample in terms of ethnicity, religion, parental income and family structure. The question was considered of whether younger participants (age 14 and below) would score differently on the FIRP than participants 15 and older, thus possibly skewing the results of this study. However, Stoll (2004) found that there were no statistically significant differences, in FIRP scores based on demographic variables such as age, family income, ethnicity, family status, religion or geographical location.

Table 2  
Demographic Characteristics of the Sample (n=243)

| Demographic Variable                           | Frequency |               | Percent of Total |
|--|-----------|---------------|------------------|
|  | Treatment | Non-Treatment |                  |
| <b>Ethnicity</b>                               |           |               |                  |
| Caucasian                                      | 125       | 97            | 91.3             |
| African-American                               | 1         | 0             | 0.4              |
| Native American                                | 3         | 0             | 1.2              |
| American Hispanic                              | 5         | 2             | 2.9              |
| Asian  | 2         | 0             | 0.8              |
| Polynesian                                     | 0         | 0             | 0.0              |
| Other  | 8         | 0             | 3.4              |
| Total  | 144       | 99            | 100              |
| <b>Religion</b>                                |           |               |                  |
| Protestant                                     | 23        | 2             | 10.3             |
| Catholic                                       | 27        | 4             | 12.8             |
| Jewish   | 9         | 0             | 3.7              |
| Latter Day Saint                               | 3         | 90            | 38.3             |
| Eastern Religion                               | 4         | 1             | 2.1              |
| Other  | 33        | 0             | 13.6             |
| No Religion                                    | 45        | 2             | 19.4             |
| Total  | 144       | 99            | 100              |
| <b>Parental Income</b>                         |           |               |                  |
| Don't Know                                     | 68        | 37            | 43.2             |
| \$0 – 19,999                                   | 0         | 2             | .8               |
| \$20,000 – 39,999                              | 4         | 8             | 4.9              |
| \$40,000 – 59,999                              | 1         | 11            | 4.9              |
| \$60,000 – 79,999                              | 4         | 5             | 3.8              |
| \$80,000 – 99,999                              | 5         | 12            | 7.0              |
| \$100,000 – 120,000                            | 15        | 8             | 9.5              |
| More than \$120,000                            | 47        | 16            | 25.9             |
| Total  | 144       | 99            | 100              |
| <b>Family Status</b>                           |           |               |                  |
| Never married                                  | 17        | 1             | 7.5              |
| Married  | 69        | 86            | 63.8             |
| Separated                                      | 11        | 0             | 4.5              |
| Divorced                                       | 16        | 3             | 7.8              |
| Divorced with one or both<br>parents remarried | 31        | 9             | 16.4             |
| Total  | 144       | 99            | 100              |

There was little ethnic diversity in the sample. 90% of the adolescents described themselves as Caucasian while Hispanics, at (7%), were the next largest ethnic group. There was slightly more diversity in religious affiliation. Over half of the adolescents reported affiliation with some type of Christian denomination while 20% claimed no religious affiliation. Nearly half of the students did not know their parents yearly income, while one quarter of the sample reported their parents made over \$120,000 per year. It is important to note, as well, that approximately one-third of the students came from non-intact families (never married, separated, divorced or remarried).

The non-treatment sample was recruited largely from Utah through students at Brigham Young University using a snowball recruiting method. They came from primarily Caucasian, middle-class, Latter Day Saint families who were not in treatment at the time of the study. Adolescents in the treatment sample tended to be upper-middle class, Christian families. Although there was an obvious religious bias in the sample, religious affiliation was not determined to be related to FIRP scores (total and subscale) in an analysis by Stoll (2004). Adolescents from the treatment sample came from regions of the United States and Canada.

*Recruitment Procedures.* Participation was requested of the adolescent in person and by mail. Adolescents in the treatment (clinical) sample were approached at their treatment facility, and the non-treatment (non-clinical) adolescents were contacted in their community using a snowball sampling technique. The treatment sample was recruited from an adolescent residential wilderness program located in Duchesne County, Utah. The sample included adolescents from all regions of the United States and some from Canada. Adolescent clients from the wilderness program were asked to voluntarily

participate in this study. Written permission for adolescent involvement was first obtained from the adolescents' parents or legal guardians and then from the adolescents after informed consent had been explained. The treatment sample then completed the questionnaire in the field under the supervision of trained therapists. Each adolescent was compensated \$10.00 for participating.

The non-treatment sample was using a sample of convenience recruiting method (snowball technique), including word of mouth, and by asking students in family science classes at Brigham Young University to recruit adolescents they know for participation. Permission for adolescent involvement was obtained from the adolescents' parents or legal guardians as well as from the adolescent participants. A compensation of \$10.00 was also given to each non-treatment adolescent participant upon completion of the questionnaire. The questionnaire packet completed by the non-treatment sample was mailed back to the researchers or picked up by a research assistant. Subjects were instructed to complete the questionnaires alone and without parental assistance.

### *Instruments*

A questionnaire packet consisting of the three shorter questionnaires was given to or mailed to all participants. The packet consisted of a short demographic questionnaire, the Family Implicit Rules Profile (FIRP) (Harper, Stoll, & Larson, in press), and the Brief Symptom Inventory (BSI) (Derogatis & Melisaratos, 1993). Treatment participants were asked to complete the questionnaire packet as it pertained to their life just before entering treatment and was administered the questionnaire about two weeks after they entered treatment. Non-treatment participants were asked to fill out the questionnaire packet as it pertained to them currently.



*Demographic Questionnaire.* Each adolescent completed a questionnaire asking for demographic data such as (see Appendix A) age, gender, if their parents are married or divorced, family income, religion, and ethnicity. The questionnaire allowed for the treatment and non-treatment adolescents to be matched on demographic variables.

*Family Implicit Rules Profile (FIRP).* The Family Implicit Rules Profile (FIRP) is a self report instrument designed by Harper, Stoll and Larson (in press) to identify the implicit constraining and facilitative rules in family process (see Appendix B). The FIRP measures both the facilitative and constraining implicit rules of family process. The modified FIRP used in the present study consisted of 58 items like: (1)“don’t talk about your feelings, (2) don’t think or talk about your thoughts, (3) don’t trust other people or yourself, (4) talk to each other, and (5) express what you think and feel.” The inappropriate caretaking of parents subscale was not used as part of the present study due to findings that the inappropriate caretaking of parents had the lowest internal consistency reliability and lowest test-retest reliability and that the scores on the inappropriate caretaking subscale were not highly correlated with the overall FIRP (Stoll, 2003). In the FIRP respondents are asked to indicate the frequency with which these dysfunctional or functional family rules have operated in their family during the past year. A five-point Likert scale is utilized with responses ranging from never (1) to most of the time (5). Scores on the modified FIRP may range from 58 to 290, with constraining items being reverse scored so that higher scores signify more perceived facilitative implicit family process rules.

The FIRP has established content validity. Correlations of the FIRP total score with the Internalized Shame Scale (ISS), and the Self-Report Family Inventory (SFI) – a

measure of family dysfunction – were moderate but significant, suggesting the measurement of different but related family system constructs (Stoll, 1999) and pointed to concurrent validity between the measures. Since no other family rules instrument exists (with the exception of the Family Rules from the Past questionnaire (Harper & Hoopes, 1991) (whose items were included in the FIRP) the resultant correlation coefficients between the ISS, SFI, and FIRP appeared to be acceptable and moreover highlight the need for an instrument like the FIRP (Stoll, 1999).

Construct validity for the FIRP was assessed using a principle components factor analysis with orthogonal rotation, four stable factors were identified. This resulted in delineating two facilitative rule factors and two constraining rule factors (Harper et. al., 2000). The two facilitative rule factors are: Kindness and Expressiveness and Connection. The constraining rule factors are: Constraining Thoughts, Feelings and Self, and Inappropriate Caretaking of Parents. Names for the factors were submitted to the panel of family systems experts that validated the content of the individual items on the FIRP.

Internal consistency reliability and re-test reliability for the FIRP were both shown to be good (Harper et. al., 2000). Internal consistency reliability was assessed using Cronbach's alpha coefficient. The alpha coefficient for the total scale was .80, and the subscale alpha coefficients ranged from .91 on the Constraining Thoughts, Feelings and Self and Kindness subscale to .78 on the Inappropriate Caretaking of Parents subscale (Stoll, 2004). Test-retest reliability for the FIRP coefficients was obtained using data from 71 subjects. A Retest was given two weeks after the original administration and reliability coefficients for the FIRP demonstrated reliability over time (Stoll, 2004). Test-

retest coefficient scores ranged from .75 to .92 on the subscales and were .94 for the total score (Stoll, 2004). These scores provide an indication that the FIRP is a reliable instrument over time. The version of the FIRP used in the present study consisted of these subscales: Kindness (18 items), Expressiveness (15 items), Constraining Thoughts and Feelings (19 items), and Family Monitoring (6 items). This resulted in a possible minimum score of 58 and a maximum score of 290. Higher scores refer to more facilitative and less constraining family process rules.

Reverse scoring of the items on Constraining Thoughts, Feelings, and Self scale allows the relative absence of constraining implicit family process rules to be added to the facilitative rules subscales (Kindness and Expression, Connection, and Family Monitoring) so that the total score represents both a relative absence of constraining rules and a presence of facilitative rules in the family. Thus, a higher overall score on the FIRP indicates the presence of more functional family behavior. Likewise, lower overall scores on the FIRP indicate the presence of more dysfunctional behavior. Because each item on the FIRP is rated on a Likert scale from one to five, the lowest possible total FIRP score for the version used is 58. Fifty eight is an indicator of a total lack of facilitative implicit family process rules and a total presence of constraining rules. The highest score possible is 290, which indicates a maximum presence of facilitative rules.

*Brief Symptom Inventory (BSI).* The Brief Symptom Inventory (BSI) is a popular instrument that is used both clinically and as a research tool (see Appendix B). The BSI contains 53 items measuring 9 primary psychological symptoms (Derogatis & Melisaratos, 1983). The BSI contains a list of symptoms such as headaches, feeling critical of others, feeling tense, feeling keyed-up, and feeling depressed. Participants

respond to the items in terms of how much they were distressed by that symptom during the past two weeks based on five possible response categories: not at all (scored 0) ; a little bit; moderately; quite a bit; and extremely (scored 4).

Derogatis and Melisaratos (1983) define psychological symptoms as fitting nine primary psychological symptom dimensions or constructs: Somatization, Obsessive-compulsive, Interpersonal sensitivity, Depression, Anxiety, Hostility, Phobic anxiety, Paranoid ideation, and Psychoticism. The five psychological symptoms chosen in the present study as being related to implicit family process rules fall within the nine outlined in the BSI. The five chosen were: Interpersonal Sensitivity, Depression, Anxiety, Somatization, and Hostility. These five dimensions and a brief definition of each are listed below.

1. Interpersonal sensitivity (I-S) – This dimension is comprised of 4 items in the BSI and is an indication of feelings of personal inadequacy and inferiority. Interpersonal sensitivity is manifest by self-deprecation, feelings of uneasiness, and marked discomfort during interpersonal interactions (Derogatis & Melisaratos, 1983).

2. Depression (DEP) – Depression is comprised of 6 items in the BSI and is reflective of a broad range of signs and symptoms of the clinical depressive syndromes (Derogatis & Melisaratos, 1983). Withdrawal of interest in life activities, loss of energy, symptoms of dysphoric affect and mood, as well as feelings of hopelessness are representative of depression.

3. Anxiety (ANX) – The anxiety dimension comprises 6 items in the BSI and incorporates a set of symptoms usually associated clinically with high manifest anxiety

(Derogatis & Melisaratos, 1983). Restlessness, nervousness, and tension as well as feelings of panic are indicative of anxiety.

4. Somatization (SOM) – Somatization is comprised of 7 items in the BSI and refers to psychological distress arising from perceptions of bodily dysfunction manifest as physical complaints. Complaints typically focus on cardiovascular, gastrointestinal, respiratory, and other systems (Derogatis & Melisaratos, 1983).

5. Hostility (HOS) – Hostility is comprised of 5 items in the BSI and includes three dimensions: thoughts, feelings, and behavior. Feelings of annoyance and irritability, urges to break things, frequent arguments and uncontrollable outbursts of temper are characteristic of the hostility dimension (Derogatis & Melisaratos, 1983).

The reliability of the BSI is of two different types: internal consistency to measure the homogeneity of the items, and test-retest reliability in order to test the stability of the measurement across time (Derogatis & Melisaratos, 1983). Internal consistency reliability for the BSI was established, using Cronbach's coefficient alpha, by Derogatis & Melisaratos (1983) using a 1,002 out-patient sample. Alpha coefficients for all 9 dimensions ranged from a low of 0.71 on psychoticism to a high of 0.85 on depression (see Table 3). Test-retest reliability was generated from BSI data on a sample of 60 non-patient subjects who were tested at a two week interval. Values ranged from a low of 0.68 for somatization to a high of 0.91 for phobic anxiety (see Table 3) thus strongly indicating that the BSI is a reliable measure over a short time (Derogatis & Melisaratos, 1983).

Table 3  
Internal Consistency and Test-Retest Reliability Coefficients for the BSI

| Symptom Dimension | No. of items | Internal Consistency Reliability (Cronbach's alpha) | Test-retest Reliability |
|-------------------|--------------|---|-------------------------|
| 1. SOM            | 7            | 0.80  | 0.68                    |
| 2. I-S            | 4            | 0.74  | 0.85                    |
| 3. DEP            | 6            | 0.85  | 0.84                    |
| 4. ANX            | 6            | 0.81  | 0.79                    |
| 5. HOS            | 5            | 0.78  | 0.81                    |

In the present study, internal consistency reliability was also established for the subscales of the BSI using Cronbach's Alpha: Somatization (.78), Interpersonal Sensitivity (.83), Depression (.88), Anxiety (.79), and Hostility (.81). The BSI uses a five point Likert scale (0-4) ranging from "not at all" (0) to "extremely" (4) to indicate the presence of a psychological symptom. The BSI generally takes less than ten minutes to complete (Derogatis & Melisaratos, 1983). The language used in the BSI at a sixth grade reading level and the BSI has been used with adolescents as young as 13 years old without apparent distortions (Derogatis & Melisaratos, 1983).

CHAPTER IV  
Results

*Preliminary Analyses*

Mean scores for the FIRP and the BSI scales for adolescents from intact and non-intact families are shown in Table 4.

*Descriptive Comparisons*

Table 4  
Mean Scores (*and standard deviations*) for FIRP and BSI Subscales by Family Status (n=243)

| Variable   | Non-Intact<br>(N=88) | Intact<br>(n=155) | T-test  | Total<br>(n=243) |
|--|----------------------|-------------------|---------|------------------|
| <b>FRP Expressiveness Subscale</b><br>(min=21, max=75)†          | 43.8<br>(11.4)       | 50.1<br>(11.9)    | 4.07**  | 47.9<br>(12.0)   |
| <b>FRP Kindness Subscale</b><br>(min=30, max=84)                 | 55.2<br>(11.2)       | 61.3<br>(11.5)    | 4.00**  | 59.1<br>(11.7)   |
| <b>FRP Monitoring Subscale</b><br>(min=7, max=29)                | 20.5<br>(5.7)        | 23.0<br>(4.8)     | -3.45** | 22.1<br>(5.3)    |
| <b>FRP Constraining Subscale</b><br>(min=31, max=91)             | 68.5<br>(13.1)       | 69.7<br>(11.4)    | -.75    | 69.3<br>(12.1)   |
| <b>BSI Anxiety Subscale</b><br>(min=0, max=23)††                 | 6.1<br>(4.7)         | 5.3<br>(4.7)      | 1.13    | 5.6<br>(4.7)     |
| <b>BSI Depression Subscale</b><br>(min=0, max=20)                | 8.2<br>(5.1)         | 6.5<br>(5.4)      | 2.50*   | 7.1<br>(5.3)     |
| <b>BSI Hostility Subscale</b><br>(min=0, max=19)                 | 6.2<br>(4.5)         | 5.3<br>(4.2)      | 1.51    | 5.6<br>(4.3)     |
| <b>BSI Interpersonal Sensitivity Subscale</b><br>(min=0, max=12) | 3.7<br>(3.2)         | 3.3<br>(3.0)      | 1.02    | 3.4<br>(3.1)     |
| <b>BSI Somatization Subscale</b><br>(min=0, max=28)              | 5.8<br>(4.7)         | 5.0<br>(4.9)      | 1.16    | 5.3<br>(4.8)     |

\* =  $p < .05$ ; \*\* =  $p < .01$

† Higher scores reflect more facilitative family rules

†† Higher scores reflect more serious psychological symptoms

As expected, adolescents from intact families had higher average scores on all of the FIRP subscales than adolescents from non-intact families. T-tests for mean differences between intact and non-intact families were significant for expressiveness, kindness and monitoring. Similarly, adolescents from intact families showed lower mean scores on all of the BSI subscales than adolescents from non-intact families, though the only t-test that was significant was for depression. These findings suggest that adolescents from non-intact families, who showed more psychological symptoms, may have experienced different family process rules than adolescents from intact families and provide empirical support to the theoretically-based decision to include Family Status in the structural equation model.



Table 5  
Mean Scores (and standard deviations) for FIRP and BSI Subscales by Treatment Status (n=243)

| Variable   | Clinical<br>(n=144) | Non-<br>clinical<br>(n=99) | T -Test  | Total<br>(n=243) |
|--|---------------------|----------------------------|----------|------------------|
| <b>FIRP Expressiveness Subscale</b><br>(min=21, max=75)          | 42.0<br>(9.4)       | 56.8<br>(9.6)              | 12.13**  | 47.9<br>(12.0)   |
| <b>FIRP Kindness Subscale</b><br>(min=30, max=84)                | 54.4<br>(11.1)      | 66.1<br>(9.0)              | -9.00**  | 59.1<br>(11.7)   |
| <b>FIRP Monitoring Subscale</b><br>(min=7, max=29)               | 19.9<br>(5.4)       | 25.3<br>(2.9)              | -10.11** | 22.1<br>(5.3)    |
| <b>FIRP Constraining Subscale</b><br>(min=31, max=91)            | 66.8<br>(12.6)      | 72.8<br>(10.3)             | -4.08**  | 69.3<br>(12.1)   |
| <b>BSI Anxiety Subscale</b><br>(min=0, max=23)                   | 6.2<br>(5.0)        | 4.7<br>(4.1)               | 2.54*    | 5.6<br>(4.7)     |
| <b>BSI Depression Subscale</b><br>(min=0, max=20)                | 8.6<br>(5.3)        | 5.0<br>(4.7)               | 5.63**   | 7.1<br>(5.3)     |
| <b>BSI Hostility Subscale</b><br>(min=0, max=19)                 | 6.3<br>(4.6)        | 4.6<br>(3.6)               | 3.33**   | 5.6<br>(4.3)     |
| <b>BSI Interpersonal Sensitivity Subscale</b><br>(min=0, max=12) | 3.7<br>(3.1)        | 2.9<br>(2.9)               | 2.08*    | 3.4<br>(3.1)     |
| <b>BSI Somatization Subscale</b><br>(min=0, max=28)              | 6.1<br>(5.1)        | 4.1<br>(4.1)               | 3.28**   | 5.3<br>(4.8)     |

\* =  $p < .05$ ; \*\* =  $p < .01$

As expected, adolescents in the non-clinical group scored higher, on average, on all of the FIRP subscales than adolescents in the clinical group, meaning, they perceived their implicit family process rules as more facilitative. In fact, t-tests for mean differences between the clinical and non-clinical groups were significant for every FIRP subscale. Similarly, adolescents in the clinical group reported higher average scores on all of the

BSI subscales than adolescents from the non-clinical group. Again, t-tests for mean differences between the clinical and non-clinical groups were significant for every BSI subscale. These findings are in line with expectations that adolescents in clinical treatment would show more psychological symptoms than adolescents who are not in clinical treatment and may have experienced less facilitative family process rules than adolescents who are not in treatment.

Table 6  
Mean Scores (*and standard deviations*) for FIRP and BSI Subscales by Gender (n=243)

| <b>Variable</b>  | <b>Males<br/>(n=150)</b> | <b>Females<br/>(n=93)</b> | <b>T-test</b> | <b>Total<br/>(n=243)</b> |
|--|--------------------------|---------------------------|---------------|--------------------------|
| <b>FIRP Expressiveness Subscale</b><br>(min=21, max=75)          | 46.3<br>(11.1)           | 50.3<br>(13.1)            | -2.42*        | 47.9<br>(12.0)           |
| <b>FIRP Kindness Subscale</b><br>(min=30, max=84)                | 57.2<br>(11.3)           | 62.2<br>(11.9)            | -3.24**       | 59.1<br>(11.7)           |
| <b>FIRP Monitoring Subscale</b><br>(min=7, max=29)               | 21.6<br>(5.3)            | 22.9<br>(5.1)             | -1.92         | 22.1<br>(5.3)            |
| <b>FIRP Constraining Subscale</b><br>(min=31, max=91)            | 68.6<br>(11.3)           | 70.3<br>(13.2)            | -1.02         | 69.3<br>(12.1)           |
| <b>BSI Anxiety Subscale</b><br>(min=0, max=23)                   | 5.2<br>(4.4)             | 6.4<br>(5.0)              | -1.89         | 5.6<br>(4.7)             |
| <b>BSI Depression Subscale</b><br>(min=0, max=20)                | 6.7<br>(5.2)             | 7.9<br>(5.5)              | -1.68         | 7.1<br>(5.3)             |
| <b>BSI Hostility Subscale</b><br>(min=0, max=19)                 | 6.1<br>(4.4)             | 5.0<br>(4.1)              | 1.96          | 5.6<br>(4.3)             |
| <b>BSI Interpersonal Sensitivity Subscale</b><br>(min=0, max=12) | 3.0<br>(2.6)             | 4.2<br>(3.5)              | 3.12**        | 3.4<br>(3.1)             |
| <b>BSI Somatization Subscale</b><br>(min=0, max=28)              | 5.1<br>(4.6)             | 5.7<br>(5.2)              | -.91          | 5.3<br>(4.8)             |

\*=  $p < .05$ ; \*\* =  $p < .01$

Table 6 demonstrates that on average, females scored higher on all subscales of both the FIRP and the BSI, except for the hostility subscale of the BSI, where males were higher. These differences were only significant for expressiveness and kindness, on the FIRP subscale, according to t-tests for mean differences between females and male. This supports Stoles' (2004) findings that adolescent males perceive family process rules more negatively only on the Expressiveness and Connection subscale. Compared to males, females appear to perceive their family rules as more facilitative but reported more psychological symptoms on the Interpersonal Sensitivity subscale. Males also scored higher than females on hostility which is congruent with previous research and theory.

An initial look at the correlations between the subscales of the FRP and the BSI, respectively, confirmed that most subscales were moderately to highly correlated with the other subscales within each measure (see Tables 7 and 8).

Table 7  
Correlations between Subscales of the FIRP (n=243)

|                       | <b>Expressiveness</b> | <b>Kindness</b> | <b>Constraint</b> | <b>Monitoring</b> |
|-----------------------|-----------------------|-----------------|-------------------|-------------------|
| <b>Expressiveness</b> | 1.00                  |                 |                   |                   |
| <b>Kindness</b>       | .79***                | 1.00            |                   |                   |
| <b>Constraint†</b>    | .38***                | .25***          | 1.00              |                   |
| <b>Monitoring</b>     | .55***                | .57***          | .21**             | 1.00              |

\*p<.05, \*\*p<.01, \*\*\*p<.001

†Higher scores reflect lower constraining thoughts, feelings and behaviors as these scores were reverse coded.

It was noted, however, was that the 'Constraint' subscale score on the FIRP did not correlate as highly with 'Expressiveness', 'Kindness' and 'Monitoring', subscale scores as those subscales did with each other.

Table 8  
Correlations between Subscales of the BSI (n=243)

|                                  | Hostility | Depression | Anxiety | Somatization | Interpersonal Sensitivity |
|----------------------------------|-----------|------------|---------|--------------|---------------------------|
| <b>Hostility</b>                 | 1.00      |            |         |              |                           |
| <b>Depression</b>                | .50***    | 1.00       |         |              |                           |
| <b>Anxiety</b>                   | .48***    | .73***     | 1.00    |              |                           |
| <b>Somatization</b>              | .38***    | .55***     | .69***  | 1.00         |                           |
| <b>Interpersonal Sensitivity</b> | .43***    | .66***     | .61***  | .38***       | 1.00                      |

\*p<.05, \*\*p<.01, \*\*\*p<.001

An examination of the correlations between the subscales of the BSI (See Table 8) showed that most subscales were moderately to highly correlated. For example, depression and anxiety showed the highest correlation (.73) among all subscales for the BSI. Somatization showed the lowest correlations with Interpersonal Sensitivity (.38) and Hostility (.38) respectively. However, all of the subscales were significantly related to each other (p<.05).

Table 9  
Correlations between Subscales of the BSI and FIRP (n=243)

|                       | Hostility | Depression | Anxiety | Somatization | Interpersonal Sensitivity |
|-----------------------|-----------|------------|---------|--------------|---------------------------|
| <b>Expressiveness</b> | -.35***   | -.33***    | -.19**  | -.17**       | -.11                      |
| <b>Kindness</b>       | -.41***   | -.30***    | -.18**  | -.26***      | -.10                      |
| <b>Constraint</b>     | -.24***   | -.35***    | -.32*** | -.18**       | -.16*                     |
| <b>Monitoring</b>     | -.32***   | -.18**     | -.14*   | -.15*        | -.08                      |

\*p<.05, \*\*p<.01, \*\*\*p<.001

The subscales of the FIRP were significantly correlated with the subscales of the BSI, (See Table 9) except for interpersonal sensitivity, which was only correlated with constraint. Interestingly, the constraint subscale of the FIRP is significantly correlated with every subscale of the BSI. Given the way constraint is coded, (i.e., a high score on the constraining subscale means a lack of constraining rules) these findings indicate that

greater levels of constraining rules would be associated with greater levels on all of the BSI subscales. The findings from this correlation table foreshadow a predictive relationship between any latent variables factored together from these subscales.

### *Factor Analysis Results*

A principal components factor analysis was performed in order to examine factor loadings of measured variables on the two latent variables, Implicit Family Process Rules and another representing Adolescent Psychological Symptoms. This was done to determine whether the subscales for each of these tests should be included in the theoretical model. The BSI and FIRP subscales were included in the factor analyses and latent variables were created using the Rule of One. According to this test, any composite variable with an eigenvalue greater than one is retained, and composite variables with eigenvalues less than one are discarded (Affifi & Clark, 1996).

The four subscales of the FIRP –Emotion, Kindness, Constraint, and Monitoring – were initially included in the factor analysis (see Table 10 below). Constraining thoughts, feelings and beliefs of self, although an FIRP subscale, was excluded from the final composite variable because it did not load onto the latent variable along with the other three (see Table 10), yet loaded highly and almost uniquely (.857) on a second extracted component that had an eigenvalue that approached one (.858). This suggests that Constraint measures a different underlying construct of Implicit Family Process Rules than do the other three subscales of this measure –Emotion, Kindness and Monitoring— which did not load onto this second component. In fact, Emotion, Kindness and Monitoring had factor loadings of  $-3.2$ ,  $-.21$  and  $-2.8$  respectively on this second component. Furthermore, when Constraining was removed from the principal

components analyses, the percentage of variance explained by the composite variable's eigenvalue increased from 61% to 76% (see Table 12). The five subscales of the BSI – Hostility, Depression, Anxiety, Somatization, and Interpersonal Sensitivity – were included in the second factor analyses to create the 'Adolescent Psychological Symptoms' composite variable. The factor analyses confirmed the interrelated nature of these subscales as each factor analysis produced only one composite variable with an eigenvalue above one. In this case the Implicit Family Process Rules Composite had an eigenvalue of 2.28 which, as noted earlier, explained 76% of the total variance contained in the three subscales Emotion, Kindness and Monitoring (See table 10). For the Adolescent Symptoms composite, an eigenvalue of 3.2 was found, which explained almost 64% of the variance contained in the five subscales, Hostility, Depression, Anxiety, Somatization, and Interpersonal Sensitivity, included in the analysis (see Table 10).

Table 10  
Factor Loadings from Principal Components Analysis (n=243)

|                                       | <b>Implicit Family Process<br/>Rules Composites</b> | <b>Adolescent Psychological<br/>Symptoms Composites</b> |
|---------------------------------------|---|---|
| <b><i>FIRP</i></b>                    |   |   |
| Emotion Subscale                      | .91   |   |
| Kindness Subscale                     | .89   |   |
| Monitoring Subscale                   | .77   |   |
| Constraint Subscale                   | .50   |   |
| <i>Eigenvalue</i>                     | <b>2.45</b>   |   |
| <i>% of Total Variance</i>            | <b>61.0%</b>  |   |
| <b><i>FIRP w/o Constraint</i></b>     |   |   |
| Emotion Subscale                      | .91   |   |
| Kindness Subscale                     | .91   |   |
| Monitoring Subscale                   | .80   |   |
| <i>Eigenvalue</i>                     | <b>2.28</b>   |   |
| <i>% of Total Variance</i>            | <b>76.0%</b>  |   |
| <b><i>BSI</i></b>                     |   |   |
| Hostility Subscale                    |   | .68   |
| Depression Subscale                   |   | .88   |
| Anxiety Subscale                      |   | .89   |
| Somatization Subscale                 |   | .75   |
| Interpersonal Sensitivity<br>Subscale |   | .78   |
| <i>Eigenvalue</i>                     |   | <b>3.20</b>   |
| <i>% of Total Variance</i>            |   | <b>63.8%</b>  |

The factor loadings for each composite variable were examined in order to understand how the composites combine the original subscale variables. The factor loadings indicate the mathematical weight that is applied to each standardized variable as it loads onto the latent variable. Table 10 shows that the standardized subscales were fairly equally weighted in the Implicit Family Process Rules composite. Likewise, all three standardized subscales had high factor loadings ranging between .80 and .91. A

similar pattern was evident in the latent variable, Adolescent Symptoms, although the factor loadings were somewhat lower, with a range between .68 and .89.

### *Goodness of Fit Estimates*

The estimated path model fit the data satisfactorily, as shown by measures of goodness of fit for the model ( $\chi^2=158.2$ ,  $df = 39$ ,  $p = .000$ ;  $GFI = .937$ ;  $TLI = .83$ ;  $CFI = .90$ ;  $RMSEA = .1$ ). Measures of goodness of fit include the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error (RMSEA) and Chi square ( $\chi^2$ ). GFI, or the goodness of fit index, indicates the proportion of the observed covariance explained by the model. CFI, or comparative fit index, shows the proportion of the improvement of overall fit of the estimated model compared with the independence model. The TLI, or Tucker-Lewis index, is similar to the CFI but adjusts for model complexity and so is less affected by sample size. For these three indexes, scores above .9 are traditionally accepted as good measures of fit. Thus, according to the criteria for the GFI, CFI this path model fit the data satisfactorily. However, the TLI for this study approached the criterion. The RMSEA is the root mean square of error or discrepancy per degree of freedom. Less than .1 is acceptable though less than .05 is typically preferred (Baron and Kenny, 1986; Cohen and Cohen, 1983; Davis, 1985; Norusis, 1993). Therefore, the path model in this study also fits the data satisfactorily according to the RMSEA.

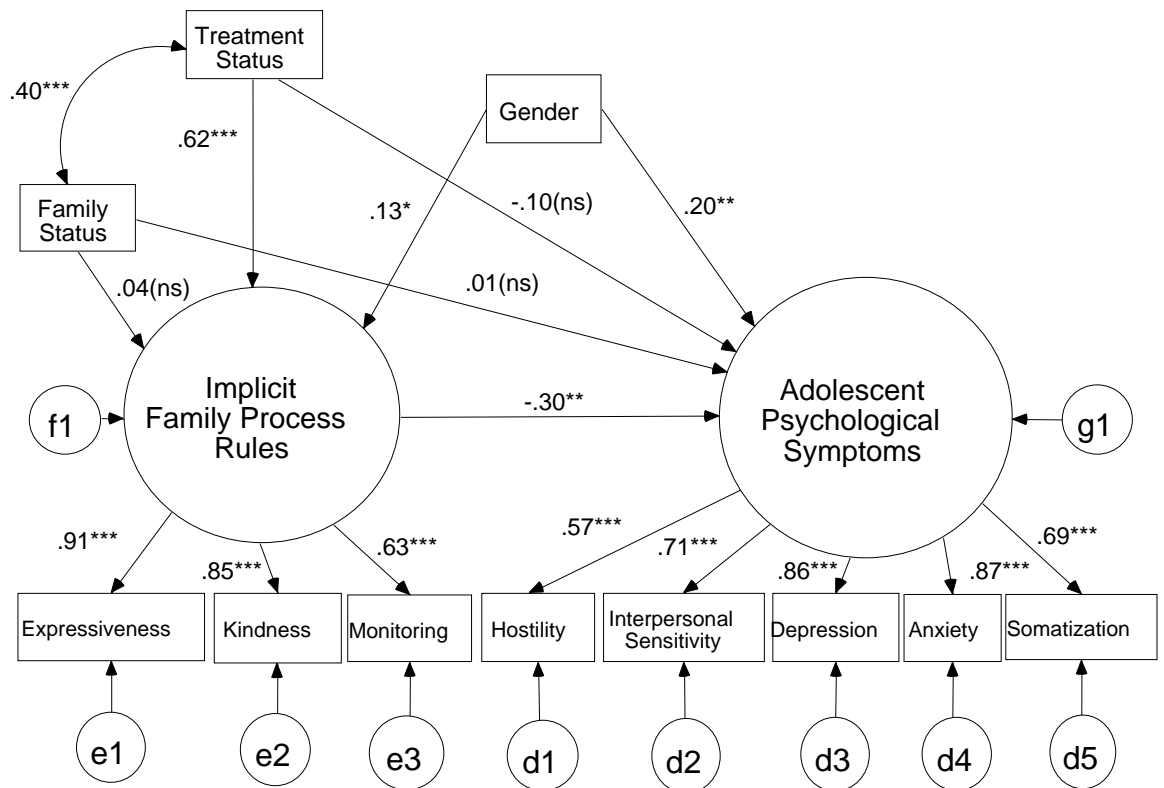
### *Structural Equation Model Results*

Structural equation modeling (SEM) (Volk & Flori, 1996) was used to explore the relationship between facilitative implicit family process rules and adolescent psychological symptoms in the theoretical model. Standardized regression coefficients



are presented in the figure below, in order to interpret the findings with comparable ease, since the variables are not all measured using the same types of scales.

Figure 2  
Estimated Structural Equation Model for Implicit Family Process Rules and Adolescent Psychological Symptoms



\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

The regression coefficients for this confirmatory measurement model are presented in the above Figure 2. The critical ratio test was used to measure significance. This test is the ratio of the estimated regression coefficient divided by the standard error and indicates at what level (and/or whether) the regression coefficient associated with the predicted path reaches significance. In this model the critical ratio was significant at the .05 level for the majority of paths. However, Family Status did not predict either Implicit

Family Process Rules or Adolescent Psychological Symptoms. Furthermore, Treatment Status had no significant effect on Adolescent psychological symptoms.

As noted, the factor loadings of the FIRP and BSI subscale indicator variables onto each respective latent variable were high, suggesting that the subscale indicator variables measured their respective latent variables well. As in factor analysis, these regression coefficients (or factor loadings) can be used to understand the meaning of the latent variables. Implicit Family Process Rules had a significant direct inverse relationship to adolescent psychological symptoms, such that higher Facilitative Implicit Family Process Rules were related to fewer Adolescent Psychological Symptoms (see Figure 2).

The exogenous independent variables of Family Status, Treatment Status, and Gender were included in the path model to identify any predictive effects on Implicit Family Rules and Adolescent Psychological Symptoms. Family Status did not have a significant direct effect on Adolescent Psychological Symptoms or on Implicit Family Process Rules. Treatment Status (Clinical/non-clinical) had a moderate to large significant association with Implicit Family Process Rules (.62). Treatment families were assigned a 1, and non-treatment families were assigned a 2, in the sample. Therefore, this positive regression coefficient suggests that families with the higher score on Treatment Status (ie, the non-treatment group) also showed higher scores on Family Implicit Process Rules (more facilitative rules). There was a small negative relationship between treatment and non treatment families for Adolescent Psychological Symptoms (-.10), however, this finding was not significant. These results are surprising, given that one might expect families with adolescents in treatment to have both less facilitative Implicit

Family Process Rules and higher levels of Adolescent Psychological Symptoms. It is possible that there is a significant indirect effect of Treatment Status on Adolescent Psychological Symptoms. However, indirect effects were not measured in this study. It is important to note that Family Status and Treatment Status co-varied significantly at .40, indicating that students whose families were intact were less likely to be in treatment.

Gender had significant relationships with both Implicit Family Process Rules (.20) and Adolescent Psychological Symptoms (.13). Gender was coded as a dichotomous dummy variable, where 1 represented male and 2 represented female. As such, a positive regression coefficient indicates that a higher score on gender (ie, females) was related to scoring higher on both facilitative Implicit Family Process Rules and Adolescent Psychological Symptoms. Given these results, it seems that females report more facilitative Implicit Family Process Rules but greater Adolescent Psychological Symptoms than males in this sample. This is not surprising, given the initial means and standard deviation scores presented earlier wherein females had higher mean scores than males across both the FIRP and the BSI subscales.

## Chapter V

### Discussion

#### *Findings*

Implicit Family Process Rules were shown to have a significant direct inverse relationship to adolescent psychological symptoms, such that higher Facilitative Implicit Family Process Rules were related to fewer Adolescent Psychological Symptoms (see Figure 3). This supports the proposed research model signifying that more facilitative family process rules may safeguard against psychological symptoms such as: interpersonal sensitivity, depression, anxiety, somatization, and hostility in adolescents. Likewise, more constraining family process rules were related to the presence of such symptoms. This direct effect between implicit family process rules and adolescent psychological functioning reinforces the idea that adolescents who come from families in which there are more facilitative implicit family process rules such as: “Play, have fun together”, “Be affectionate”, and “Express what you think and feel” manifest fewer psychological symptoms such as: Interpersonal sensitivity, anxiety, depression, somatization and hostility.

This study is unique in that it is the first to establish the significance of the relationship between specific adolescent psychological symptoms and specific implicit family process rules. Previous research only investigated the role of implicit family rules on two measures of adolescent well-being: eating disorders and being in a clinical setting. For example, Gillette (2003) found that eating disordered families had less functional family rules than non-eating disordered families as exhibited by their scores on the FRP.

Similarly, Stoll (2003) found that clinical families had more constraining and less facilitative family process rules than non-clinical families. Specifically, non-clinical families scored higher on the FIRP subscales of Kindness, Expressiveness and Monitoring than clinical families. Gillette's (2003) and Stoll's (2003) findings are supported by the results of this study, which found that adolescents from non-treatment families more often reported the presence of facilitative family process rules in their families than adolescents from treatment families.

This study also found that adolescents in treatment families exhibited more psychological symptoms, namely hostility, interpersonal sensitivity, depression, anxiety and somatization, raising important questions about the role of implicit family process rules in creating healthy family environments, thus keeping them out of treatment. This study goes beyond Stoll's (2003) work to suggest specific psychological symptoms that may be related to implicit family process rules. It is interesting to note that this study suggests that implicit family process rules affect both internalizing symptoms (i.e., Depression, Anxiety, Somatization) and externalizing symptoms (i.e., Hostility) in a similar manner. Future research should further investigate which implicit family process rules are directly related to each specific psychological symptom. For example, findings from this study suggest (see Table 9), that the more kind a family is, the less hostility the adolescent will experience ( $r = -.41$ ). Similarly the more expressive a family is the less depressed ( $r = -.33$ ) the adolescent will be. These questions, and others, should be explored with attention given to therapeutic interventions that support facilitative family process rules that best promote adolescent psychological well-being.

While Andrus-Parks (1998) found that males perceive family process rules more negatively than females overall, this study supports Stoll's (2004) finding that, regardless of treatment status, males perceived family process rules as less expressive and less connected than females only on the Expressiveness and Connection subscale. Thus this study, as with Stoll, (2004) did not find any significant gender differences in adolescent perceptions of family rules for the Kindness subscale.

Possible explanations for why females perceive Expression and Connection family rules as more facilitative could be sociological or physiological (Gilligan, 1982; Gottman & Silver, 1999; Tannen, 1990). This study also found that females reported more psychological symptoms than males. It may be that females report, rather than experience, more psychological symptoms than males, as they may tend to be more open to acknowledging psychological symptoms in general (Gilligan, 1982; Gottman & Silver, 1999; Tannen, 1990). Both sociological and physiological influences may impact development, perception, and compliance with implicit family process rules.

Physiological responses may influence patterns of behavior and over time these patterns of behavior become socially accepted. Since these patterns of behavior are repeated and expected, by definition there are process rules guiding the process (Stoll,2004). Also sociology may influence and alter physiology over time. This happens when socially encouraged perceptions lead to decreased arousal, stress and threat. This proposition should be examined more systematically in future research with particular attention paid to how gender might affect the reporting of implicit family process rules as well as adolescent psychological symptoms. Future research should investigate the role of

implicit family process rules as a socializing agent in perpetuating gender specific caretaking and communication roles.

This study also found that adolescents from non-intact families reported less facilitative family process rules than did adolescents from intact families. Although significant, the effect of family status on implicit family process rules and adolescent psychological symptoms was quite small in the final model for this sample, limiting the role of family status as a predictor of implicit family rules and adolescent psychological symptoms. For the purpose of this study, it was necessary to transform family status categories – never married, married, separated, divorced, remarried -- into a dichotomous variable of intact and non-intact families. This transformation may have contributed to the minimal effect of family status in this model. The findings of this study with regard to the role of family status, therefore, should not be interpreted as definitive; rather, future research should seek to explore the ways various family structures are related to the implicit family rules and their effects on adolescent psychological symptoms.

Additionally, Family Status and Treatment Status were significantly correlated ( $r=.40$ ). This finding reflects the fact that 48% of clinical families were also intact families (married never divorced), while 87% of non-clinical families were intact. This relationship between Family Status and Treatment Status raises further important questions about interpreting the lack of a relationship between Family Status and implicit family process rules. The strong relationship between these two exogenous independent variables presents potential for a confounding effect of family status on rules and that would have been valuable if accounted for in the model. It is hypothesized that if Treatment Status was removed from the model, Family Status would show a significant

relation to both Implicit Family Process Rules, as well as to Psychological Symptoms. It is posited that such a strong correlation between Family Status and Treatment Status implies that family status may indeed predict if a family will seek treatment. An indirect relationship between Treatment Status and Adolescent Psychological Symptoms through Implicit Family Process Rules was suggested in the model. However, no tests for indirect effects were done, as this was not the purpose of the study. This finding is important, however, in that it suggests that being in treatment isn't related to adolescent psychological symptoms unless facilitative implicit family process rules are missing. Treatment Status may, also, be a mediating variable in the relationship between Family Status and Implicit Family Process Rules, indicating that constraining Family Process Rules emerge only as, or after, the adolescent enters treatment. These hypotheses should be examined in future research.

This study supports the hypotheses that implicit family process rules are important to study because it shows that they have a significant effect on adolescent psychological symptoms. The inverse relationship –that adolescent psychological symptoms in families may directly affect the implicit rules in families – can be surmised as well. This would indicate a reciprocal relationship between implicit family process rules and adolescent psychological symptoms, rather than a linear casual effect. This hypothesis, however, was not directly explored in this study due to the cross-sectional design. Gillette showed that implicit family rules are related to eating disorders. Future research should explore if implicit process rules are related to other forms of psychopathology. For example, do constraining implicit family process rules contribute to delusional thinking disorders such as paranoia, or contribute to obsessive compulsive



disorder, or phobias in adolescents? Also it would be valuable for future researchers to investigate any relationships between implicit family process rules and personality disorders in adolescents. Furthermore, how do implicit family process rules influence adolescent's ability to cope with adaptive ways of dealing with overall stress in their lives? Ultimately the relationship that adolescent psychological symptoms and behavior may have on the implicit rules families develop needs to be explored.

### *Limitations of Study*

For the purposes of this study the independent variables of Treatment Status and Family Status were included in the model. However, the treatment population was used primarily to facilitate recruitment of a larger sample needed to construct the path model. The treatment population was not, necessarily, foreseen to be unhealthier or to predict more clinical results as no clinical scores of well-being were performed to indicate cut-offs in either population. Previous research, however, did find correlations between treatment status and family process rules and psychological symptoms (Gillett, 2003; Stoll, 2004). Since Treatment Status was included in the model and appears to have both direct and indirect implications on results, it should be examined in future research.

The sample used in this study, though large enough, could be construed as biased in its selection. There was little ethnic diversity in the sample. Over 90% of the adolescents described themselves as Caucasian while Hispanics, at 7%, were the next largest ethnic group. There was slightly more diversity in religious affiliation. Over half of the students reported affiliation with some type of Christian denomination while 20% claimed no religious affiliation at all. Due to the selection methodology for the non-treatment sample (sample collected using students at Brigham Young University), 91%

(90 of 99) reported being Latter Day Saints (LDS). While only .02% (3 of 144) reported being LDS in the treatment sample. This high concentration of LDS in the non-treatment sample, indeed, had an influence on the type of family rules that this sample possess and could influence any differences revealed between treatment and non-treatment samples. In this study, as the independent variable of Treatment Status was treated as another demographic finding, and not used to differentiate between populations, this constraint is not of consequence to this study, but should be taken into consideration for future research estimate comparisons.

While nearly half of the students did not know their parents income, one quarter of the sample reported that their parents made over \$120,000 per year making their incomes higher than average. Gender was also not evenly represented as there were almost twice as many clinical males in the sample than any other type of participant. This was due to the large proportion of the treatment sample populations chosen for their convenience. Questions were raised concerning the validity of this study as it relates to more ethnically and religiously diverse and more socio-economically and challenged populations. Stoll (2004), however, did not find significant differences between ethnic, religious and socio-economic groups in terms of FIRP total and subscale scores.

Another problem in the study was that the FIRP subscale of Constraint proved problematic because it did not seem to measure the same construct in our sample. A decision was made to exclude it from the model, based on the fact that in the factor analysis, Constraint emerged on a second factor. Also in a trial run of the proposed model, Constraint was shown to load similarly on both implicit family process rules and adolescent psychological symptoms. When the model was run with this in mind,

however, the goodness of fit of the model decreased dramatically. Although Constraint was correlated with adolescent symptoms, in the correlation matrix, it did fit together well with the other subscales of the FRP in Factor Analysis. Also, Constraint may prove in some ways to be a harder family rule to measure, in which case steps should be taken to develop more valid questions that target constraining implicit family process rules in the FIRP itself. It is not clear whether constraining family process rules are inherently maladaptive for family systems. Measurement problems may also have been present, but this study does suggest that Constraint may truly measure a different underlying construct. Constraining rules were an important part of the theory upon which this study was based and future research should investigate the ways in which constraining family process rules affect adolescent psychological symptoms. Also, a clinical cut-off score for the FIRP would be beneficial in helping clinicians and researcher to asses and determine the wellbeing of adolescents and implicit family process rules in families.

#### *Clinical Implications for Marriage and Family Therapists*

Adolescents are particularly vulnerable as they try to understand interpersonal relationships, form more intimate ones, and make decisions about self-disclosure and who they are intrinsically. As such, there is an increasingly pressing need to understand how families influence adolescent development and symptom formation in order to facilitate and better understand interventions at the family level as well as the level of the individual adolescent (Carter & McGoldrick, 1999; Sells, 1998). Understanding the relationship between implicit family process rules and adolescent symptomology will allow the practitioner to better understand and better attend to the families' contribution on adolescent psychological symptoms, in terms of implicit family process rules.

This research is a step toward a more epistemologically sound approach to family interventions with adolescents as well as a step toward preventative family therapy and education and a more comprehensive analysis of family patterns and potential individual dysfunction. By understanding the impact that facilitative and constraining family process rules have on family members, practitioners will be able to develop a more comprehensive treatment model for adolescents exhibiting negative psychological symptoms.

Based on the concept that family rules may be assessed and are amenable to change (Satir, 1988), the question then becomes when and how to intervene to make these changes to help prevent the development of adolescent psychological symptoms. The first tool needed is a valid self-report assessment that can be easily implemented by the therapist. The FRP goes a long way in fulfilling this need. This measure can be administered at intake of family therapy. It may also be administered to the family of an adolescent who seeks treatment or who is sent to treatment by their family. Whatever the scenario, an initial assessment is vital to understanding, and therefore being able to change, if necessary, family process rules.

This study supports a need for more specialized or specific focus on treatment techniques for adolescents and their families that would facilitate family assessment for, and the amelioration of constraining implicit family process rules. Another interesting vein of research might focus on the effect of implicit family process rules on externalizing or more observable behaviors. Creating effective interventions for family therapists to use as they treat adolescents and their families, is then, of paramount importance to future research and work with implicit family process rules. Treatment

families are the most at risk for having less facilitative family process rules, and thus, becoming a non-treatment or non-clinical family might be a direct result of creating facilitative family process rules. Thus, a more direct approach to changing implicit family process rules, such as making them more explicit in therapy, might be an effective therapeutic approach. Therapeutic techniques and methods that report to promote or support healthy rule development in families ought to be looked at more earnestly with a serious intent to promote such techniques in families with adolescents. Also, especially with parents, addressing the ways in which family process rules are implicit and not supportive of adolescent functioning would prove to be an effective therapeutic application of this study.

Drawing on family systems theory, patterns are maintained in families by both explicit and implicit family rules (Nichols & Swartz, 1995). These rules serve to keep the family safe and in its comfort zone by maintaining the homeostasis of the family. A marriage and family therapist, then, who is aware of the implicit rules governing the family system may intervene at any point in that system in order to effect change. This may be done by altering or highlighting the families implicit process rules within the family system in order to affect more positive outcomes in adolescent mental health. Marriage and family therapists, working with adolescents, may confront unhealthy implicit family process rules and promote facilitative implicit family process rules at any point and with any member within the family system. One interesting question would be to examine if all family members agree on how healthy or unhealthy the family rules are, linking the understanding of family process rules to the various roles each member plays in the family system.

Not only can the understanding of how healthy and unhealthy implicit family rules influence the direct focus of treatment for adolescents and their families, but that understanding also carries important implications for preventive family life education. An awareness of the importance and function of facilitative implicit family process rules in the development of psychologically healthy children and adolescents will benefit parents as well as therapists and family life educators invested in raising psychologically healthy children. The avoidance or timely treatment of psychological symptoms related to family rules early on should help to improve adolescents' functioning in current and future relationships such as dating, courtship, and marriage (Larson, Taggart-Reedy, & Wilson, 2001).

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Appendix A  
Demographic Questionnaire

## Demographic Information

- 1) Your Gender (please circle): Male / Female
- 2) Your AGE (write-in): \_\_\_\_\_
- 3) What is the city and state in which you live? City: \_\_\_\_\_  
State: \_\_\_\_\_
- 4) What is your ethnicity? (Circle one):
  - 1) Caucasian (white) 2) African American 3) Native American
  - 4) American Hispanic 5) Asian 6) Polynesian
  - 7) Other: \_\_\_\_\_
- 5) What is your religious preference? (Circle one):
  - 1) Protestant (e.g. Baptist, Lutheran, Methodist, etc.) 2) Catholic 3) Jewish
  - 4) LDS
  - 5) Eastern Religion (e.g. Hindu, Buddhist, Muslim, etc.)
  - 6) Other (write-in): \_\_\_\_\_ 7) No religion
- 6) What is your approximate yearly total family income? (Circle one):
  - 0) Don't know 1) \$0-\$19,999 2) \$20,000-\$39,999 3) \$40,000-\$59,999
  - 4) \$60,000-\$79,999 5) \$80,000-\$99,999 6) \$100,000-\$120,000
  - 7) more than 120,000
- 7) Your parents currently are (Circle one):
  - 1) Never married 2) Married 3) Separated 4) Divorced
  - 5) Divorced with one or both parents remarried

## Appendix B

### Family Implicit Rules Profile and Brief Symptom Inventory Questionnaires

## Family Implicit Rules Profile

**Instructions:** The items below are about *unspoken* rules in your family. These rules do not have to be talked about to operate in families. When answering each item, please ask, **How much has the unspoken rule operated in my family during the last year?** Then using the scale on the right, circle the number that represents your answer. For example on number 1, please ask **How much has the unspoken rule, (“Support each other”) operated in my family during the last year?** If you believe it was most of the time, circle the number 5.

| How much has the unspoken rule (Insert rule from below) operated during the last year? | <u>Never</u> | <u>Seldom</u> | <u>With Some Regularity</u> | <u>Often</u> | <u>Most of the Time</u> |
|--|--------------|---------------|-----------------------------|--------------|-------------------------|
| 1) Support each other.   | 1            | 2             | 3                           | 4            | 5                       |
| 2) Be open with each other.  | 1            | 2             | 3                           | 4            | 5                       |
| 3) Don't feel or talk about feelings.  | 1            | 2             | 3                           | 4            | 5                       |
| 4) Don't think or talk about thoughts.   | 1            | 2             | 3                           | 4            | 5                       |
| 5) Be sensitive to others.   | 1            | 2             | 3                           | 4            | 5                       |
| 6) Stand up for others in the family.  | 1            | 2             | 3                           | 4            | 5                       |
| 7) Be fair.  | 1            | 2             | 3                           | 4            | 5                       |
| 8) Protect your mother even when she doesn't deserve it.                               | 1            | 2             | 3                           | 4            | 5                       |
| 9) Share your feelings.  | 1            | 2             | 3                           | 4            | 5                       |
| 10) Don't get close to people.   | 1            | 2             | 3                           | 4            | 5                       |
| 11) Show physical affection within the family.   | 1            | 2             | 3                           | 4            | 5                       |
| 12) Encourage others to share their feelings.  | 1            | 2             | 3                           | 4            | 5                       |
| 13) Be careful to say the right thing when you offer your opinion.                     | 1            | 2             | 3                           | 4            | 5                       |
| 14) Don't be direct.   | 1            | 2             | 3                           | 4            | 5                       |
| 15) Talk things out; don't withdraw.   | 1            | 2             | 3                           | 4            | 5                       |
| 16) Don't blame others unfairly.   | 1            | 2             | 3                           | 4            | 5                       |

|   |              |               |                   |              |                 |
|---|--------------|---------------|-------------------|--------------|-----------------|
| 17) Be grateful.  | 1            | 2             | 3                 | 4            | 5               |
| <b>How much has the unspoken rule (Insert rule from below) operated during the last year?</b> |              |               | <b>With Some</b>  |              | <b>Most of</b>  |
|   | <b>Never</b> | <b>Seldom</b> | <b>Regularity</b> | <b>Often</b> | <b>the Time</b> |
| 18) Regardless of whether he deserves it, protect your father.                                | 1            | 2             | 3                 | 4            | 5               |
| 19) Don't criticize.  | 1            | 2             | 3                 | 4            | 5               |
| 20) Do things together.   | 1            | 2             | 3                 | 4            | 5               |
| 21) Don't be yourself; pretend to be someone you are not.                                     | 1            | 2             | 3                 | 4            | 5               |
| 22) Listen to a parent when they need to complain about the other parent.                     | 1            | 2             | 3                 | 4            | 5               |
| 23) Play, have fun together.  | 1            | 2             | 3                 | 4            | 5               |
| 24) Don't identify, talk about, or solve problems.  | 1            | 2             | 3                 | 4            | 5               |
| 25) Share the happenings of your day with family members.                                     | 1            | 2             | 3                 | 4            | 5               |
| 26) Never upset your father by expressing your feelings.                                      | 1            | 2             | 3                 | 4            | 5               |
| 27) Don't grow, change, or in any way "rock your family's boat."                              | 1            | 2             | 3                 | 4            | 5               |
| 28) Don't call each other harmful names.  | 1            | 2             | 3                 | 4            | 5               |
| 29) Be in control of yourself at all times.   | 1            | 2             | 3                 | 4            | 5               |
| 30) Be kind and compassionate.  | 1            | 2             | 3                 | 4            | 5               |
| 31) Give others a chance to speak.  | 1            | 2             | 3                 | 4            | 5               |
| 32) Rely on yourself—not family members.  | 1            | 2             | 3                 | 4            | 5               |
| 33) Share as little information as possible with other family members.                        | 1            | 2             | 3                 | 4            | 5               |
| 34) Allow others to help you solve problems.  | 1            | 2             | 3                 | 4            | 5               |
| 35) Talk to each other.   | 1            | 2             | 3                 | 4            | 5               |

|   |                     |                      |                          |                     |                        |
|---|---------------------|----------------------|--------------------------|---------------------|------------------------|
| 36) Never upset your mother by expressing your feelings.                                      | 1                   | 2                    | 3                        | 4                   | 5                      |
| 37) Don't trust others, including family members.   | 1                   | 2                    | 3                        | 4                   | 5                      |
| 38) Be friendly.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| <b>How much has the unspoken rule (Insert rule from below) operated during the last year?</b> |                     |                      | <b>With Some</b>         |                     | <b>Most of</b>         |
|   | <b><u>Never</u></b> | <b><u>Seldom</u></b> | <b><u>Regularity</u></b> | <b><u>Often</u></b> | <b><u>the Time</u></b> |
| 39) Don't talk about anything that makes family members feel uncomfortable.                   | 1                   | 2                    | 3                        | 4                   | 5                      |
| 40) Be affectionate.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 41) Express what you think and feel.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 42) Meet others' expectations even if it's not a good thing for you.                          | 1                   | 2                    | 3                        | 4                   | 5                      |
| 43) Don't talk about family relationships with family members.                                | 1                   | 2                    | 3                        | 4                   | 5                      |
| 44) Be flexible enough to entertain others' views and opinions.                               | 1                   | 2                    | 3                        | 4                   | 5                      |
| 45) Rather than be who you are, act good, right, strong, or perfect.                          | 1                   | 2                    | 3                        | 4                   | 5                      |
| 46) Make decisions together as a family.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 47) Don't trust yourself, your feelings, or your conclusions.                                 | 1                   | 2                    | 3                        | 4                   | 5                      |
| 48) Don't talk to your parents about things that make them uncomfortable.                     | 1                   | 2                    | 3                        | 4                   | 5                      |
| 49) Be gentle with others.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 50) Lie if necessary to keep family secrets.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 51) Work out problems with other family members.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 52) Look for the best in others.  | 1                   | 2                    | 3                        | 4                   | 5                      |
| 53) Don't inconvenience a parent.   | 1                   | 2                    | 3                        | 4                   | 5                      |

|   |              |               |                   |              |                 |
|---|--------------|---------------|-------------------|--------------|-----------------|
| 54) Don't use physical force with other family members.                                       | 1            | 2             | 3                 | 4            | 5               |
| 55) Get input from other family members about major decisions in your life.                   | 1            | 2             | 3                 | 4            | 5               |
| 56) Don't have fun, don't be silly or enjoy life.   | 1            | 2             | 3                 | 4            | 5               |
| 57) Be supportive of others during difficult times.   | 1            | 2             | 3                 | 4            | 5               |
| <b>How much has the unspoken rule (Insert rule from below) operated during the last year?</b> |              |               | <b>With Some</b>  |              | <b>Most of</b>  |
|   | <b>Never</b> | <b>Seldom</b> | <b>Regularity</b> | <b>Often</b> | <b>the Time</b> |
| 58) Protect your father emotionally even if you have to sacrifice yourself.                   | 1            | 2             | 3                 | 4            | 5               |
| 59) Protect your mother emotionally even if you have to sacrifice yourself.                   | 1            | 2             | 3                 | 4            | 5               |
| 60) What your father doesn't know won't hurt him.   | 1            | 2             | 3                 | 4            | 5               |
| 61) What your mother doesn't know won't hurt her.   | 1            | 2             | 3                 | 4            | 5               |
| 62) If you can't say something nice, don't say anything at all.                               | 1            | 2             | 3                 | 4            | 5               |
| 63) Don't mess up.  | 1            | 2             | 3                 | 4            | 5               |

## Brief Symptom Inventory

**Instructions:** On the following pages is a list of problems people sometimes have. Please read each one carefully, and circle the number that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem and do not skip any items. Read the example before beginning.

Example:

HOW MUCH WERE YOU DISTRESSED BY:

|   | <u>Not at</u> | <u>A</u>      | <u>Quite</u>      |                               |
|---|---------------|---------------|-------------------|-------------------------------|
|   | <u>All</u>    | <u>Little</u> | <u>Moderately</u> | <u>A Bit</u> <u>Extremely</u> |
| Body aches<br>(If you were distressed quite a bit, circle a 3.) | 0             | 1             | 2                 | 3 4                           |



HOW MUCH WERE YOU DISTRESSED BY:

|   | <u>Not at All</u> | <u>A Little</u> | <u>Moderately</u> | <u>Quite A Bit</u> | <u>Extremely</u> |
|---|-------------------|-----------------|-------------------|--------------------|------------------|
| 64) Nervousness or shakiness inside                       | 0                 | 1               | 2                 | 3                  | 4                |
| 65) Faintness or dizziness                                | 0                 | 1               | 2                 | 3                  | 4                |
| 66) The idea that someone else can control your thoughts  | 0                 | 1               | 2                 | 3                  | 4                |
| 67) Feeling others are to blame for most of your troubles | 0                 | 1               | 2                 | 3                  | 4                |
| 68) Trouble remembering things                            | 0                 | 1               | 2                 | 3                  | 4                |
| 69) Feeling easily annoyed or irritated                   | 0                 | 1               | 2                 | 3                  | 4                |
| 70) Pains in heart or chest                               | 0                 | 1               | 2                 | 3                  | 4                |
| 71) Feeling afraid in open spaces or on the streets       | 0                 | 1               | 2                 | 3                  | 4                |
| 72) Thoughts of ending your life                          | 0                 | 1               | 2                 | 3                  | 4                |
| 73) Feeling that most people cannot be trusted            | 0                 | 1               | 2                 | 3                  | 4                |
| 74) Poor appetite   | 0                 | 1               | 2                 | 3                  | 4                |
| 75) Suddenly scared for no reason                         | 0                 | 1               | 2                 | 3                  | 4                |

HOW MUCH WERE YOU DISTRESSED BY:

|  | <u>Not at All</u> | <u>A Little</u> | <u>Moderately</u> | <u>Quite A Bit</u> | <u>Extremely</u> |
|--|-------------------|-----------------|-------------------|--------------------|------------------|
| 76) Temper outbursts that you could not control  | 0                 | 1               | 2                 | 3                  | 4                |
| 77) Feeling lonely even when you are with people | 0                 | 1               | 2                 | 3                  | 4                |
| 78) Feeling blocked in getting things done       | 0                 | 1               | 2                 | 3                  | 4                |
| 79) Feeling lonely                               | 0                 | 1               | 2                 | 3                  | 4                |
| 80) Feeling blue                                 | 0                 | 1               | 2                 | 3                  | 4                |
| 81) Feeling no interest in things                | 0                 | 1               | 2                 | 3                  | 4                |
| 82) Feeling fearful                              | 0                 | 1               | 2                 | 3                  | 4                |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 83) Your feelings being easily hurt   | 0 | 1 | 2 | 3 | 4 |
| 84) Feeling that people are unfriendly or dislike you                               | 0 | 1 | 2 | 3 | 4 |
| 85) Feeling inferior to others  | 0 | 1 | 2 | 3 | 4 |
| 86) Nausea or upset stomach   | 0 | 1 | 2 | 3 | 4 |
| 87) Feeling that you are watched or talked about by others                          | 0 | 1 | 2 | 3 | 4 |
| 88) Trouble falling asleep  | 0 | 1 | 2 | 3 | 4 |
| 89) Having to check and double-check what you do                                    | 0 | 1 | 2 | 3 | 4 |
| 90) Difficulty making decisions   | 0 | 1 | 2 | 3 | 4 |
| 91) Feeling afraid to travel on buses, subways, or trains                           | 0 | 1 | 2 | 3 | 4 |
| 92) Trouble getting your breath   | 0 | 1 | 2 | 3 | 4 |
| 93) Hot or cold spells  | 0 | 1 | 2 | 3 | 4 |
| 94) Having to avoid certain things, places, or activities because they frighten you | 0 | 1 | 2 | 3 | 4 |
| 95) Your mind going blank   | 0 | 1 | 2 | 3 | 4 |
| 96) Numbness or tingling in parts of your body                                      | 0 | 1 | 2 | 3 | 4 |
| 97) The idea that you should be punished for your sins                              | 0 | 1 | 2 | 3 | 4 |

HOW MUCH WERE YOU DISTRESSED BY:

|   | <u>Not at All</u> | <u>A Little</u> | <u>Moderately</u> | <u>Quite A Bit</u> | <u>Extremely</u> |
|---|-------------------|-----------------|-------------------|--------------------|------------------|
| 98) Feeling hopeless about the future   | 0                 | 1               | 2                 | 3                  | 4                |
| 99) Trouble concentrating               | 0                 | 1               | 2                 | 3                  | 4                |
| 100) Feeling weak in parts of your body | 0                 | 1               | 2                 | 3                  | 4                |
| 101) Feeling tense or keyed up          | 0                 | 1               | 2                 | 3                  | 4                |
| 102) Thoughts of death or dying         | 0                 | 1               | 2                 | 3                  | 4                |

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 103) Having urges to beat, injure, or harm someone                  | 0 | 1 | 2 | 3 | 4 |
| 104) Having urges to break or smash things                          | 0 | 1 | 2 | 3 | 4 |
| 105) Feeling very self-conscious with others                        | 0 | 1 | 2 | 3 | 4 |
| 106) Feeling uneasy in crowds, such as shopping or at a movie       | 0 | 1 | 2 | 3 | 4 |
| 107) Never feeling close to another person                          | 0 | 1 | 2 | 3 | 4 |
| 108) Spells of terror or panic                                      | 0 | 1 | 2 | 3 | 4 |
| 109) Getting into frequent arguments                                | 0 | 1 | 2 | 3 | 4 |
| 110) Feeling nervous when you are left alone                        | 0 | 1 | 2 | 3 | 4 |
| 111) Others not giving you proper credit for your achievements      | 0 | 1 | 2 | 3 | 4 |
| 112) Feeling so restless you couldn't sit still                     | 0 | 1 | 2 | 3 | 4 |
| 113) Feelings of worthlessness                                      | 0 | 1 | 2 | 3 | 4 |
| 114) Feeling that people will take advantage of you if you let them | 0 | 1 | 2 | 3 | 4 |
| 115) Feelings of guilt  | 0 | 1 | 2 | 3 | 4 |
| 116) The idea that something is wrong with your mind                | 0 | 1 | 2 | 3 | 4 |

**Thank you for your participation! Mail this questionnaire back to us using the enclosed self-addressed, stamped envelope. When we receive your questionnaire, we will send you \$10.**

## Appendix C

### Project Description and Consent Forms

**PROJECT FAMILY RULES**  
**Jeffrey H. Larson, Ph. D., LMFT, Director**  
**274 TLRB, BYU, Provo, UT 84602**

Dear \_\_\_\_\_ Family,

Your friend, \_\_\_\_\_, has nominated your adolescent to participate in this research project in return for extra-credit opportunities in one of his/her university classes. The purpose of our project is to gather information with which to better understand and serve families and adolescents much like yours. All of the information your teen provides is confidential. When the questionnaire is received, it is identified by a number and entered into a database. At that point, your teen's answers are linked only to that number so that the answers remain anonymous.

Through this study we hope to better understand the effects of family rules and leisure activities on teens' emotional wellness.

Although your son's or daughter's participation in this study is entirely voluntary, their response is extremely important to the overall success of the project. We have enclosed consent forms for you and your teen to sign, the family rules questionnaire, and a separate postage-paid, self-addressed return envelope in which to return everything. When we receive the completed questionnaire, we will mail your teen \$10.00 as a way of saying, Thank you!

Should you have any further questions pertaining to this study or experience any problems related to completing the questionnaire, please contact Dr. Jeffrey Larson at 801-422-2344. Thank you in advance for encouraging your teen's participation in this important project.

Sincerely,

Dr. Jeffrey Larson  
Project Director

## Parental Consent to Participate in Research

The following questionnaire is designed to encourage adolescents to consider unspoken family rules, emotional wellness and participation in leisure activities. Dr. Jeffry Larson, a licensed marriage and family therapist and faculty member at Brigham Young University is conducting this survey. **Your teenager has been chosen to participate in this study because students in classes at Brigham Young University have identified your family as including at least one teenager between the ages of 13 and 18.**

**The following are examples of questions that will be asked regarding family rules: Answer how often during the last year the following rules operated in your family: “Don’t feel or talk about feelings;” “Be supportive of others during difficult time;” and “Support each other.” Examples of wellness questions are: “How much were you distressed by: bodyaches; feeling tense or keyed up; and difficulty making decisions.” Examples of leisure participation questions are: “Make a list of all the leisure activities that you find give you a sense of achievement, not only sporting activities”; and, “How enjoyable do you find each of these social activities?”**

Participation in this project requires demographic information and questionnaire responses from teenagers between the ages of 13 and 17. It is anticipated that your teen may spend 30-40 minutes providing the needed information. Risks to participants are minimal but for those who are struggling with family relationships or emotional problems there may be some emotional discomfort answering the items on the questionnaire. Should this happen we can refer you to a national network of certified, licensed therapists. Benefits of participating in this study include an opportunity for your teenager to examine and/or reconsider unspoken family rules that influence family interaction and to assess one’s personal wellness and use of leisure. It is also anticipated that the results of this research will allow therapists and other professionals to understand and assist family members in improving family relationships and emotional wellness. Participation in this research is voluntary and **refusal to participate and/or withdrawal will not result in any penalty whatsoever.** All information obtained will be treated in strict confidence and there will be no reference to participants’ identification at any point in this research.

As an incentive to participate in this research, your teen will receive \$10 cash reimbursement by mail after returning the survey. If you prefer that we mail the cash directly to you instead, please let us know by email at: jeffry\_larson@byu.edu.

For questions or concerns regarding this study please contact Dr. Jeffry Larson, LMFT, at (801) 422-2344; 274 TLRB Brigham Young University, Provo, UT 84602.

For questions regarding research participants’ rights please contact Dr. Shane Schulthies, Chair of the Human Subjects Institutional Review Board, at (801) 422-5490.

I have read, understood, and received a copy of the above and voluntarily consent to have my adolescent participate in this study.

---

Parent’s Signature/Date

## Adolescent Consent to Participate in Research

The following questionnaire is designed to encourage adolescents to consider unspoken family rules, emotional wellness and participation in leisure activities. Dr. Jeffry Larson, a licensed marriage and family therapist, and faculty member at Brigham Young University is conducting this survey. **You have been chosen to participate in this study because students in classes at Brigham Young University have identified your family as including at least one teenager between the ages of 13 and 17.**

**The following are examples of questions that will be asked regarding family rules: Answer how often during the last year the following rules operated in your family: “Don’t feel or talk about feelings;” “Be supportive of others during difficult time;” and “Support each other.” Examples of wellness questions are: “How much were you distressed by: bodyaches; feeling tense or keyed up; and difficulty making decisions.” Examples of leisure participation questions are: “Make a list of all the leisure activities that you find give you a sense of achievement, not only sporting activities”; and, “How enjoyable do you find each of these social activities?”**

If you decide to be a part of this study, we want to know information about you regarding your: age, gender, about how much money your family makes, hometown, race, religious preference, and if your parents are married, divorced, separated, etc. It may take up to 30-40 minutes for you to fill everything out. This study is not dangerous at all, but if anyone in your family has a hard time getting along with one another it may cause very slight upset feelings. If this happens and you would like to talk to a therapist, we can help you find one. The results of this research will help therapists and other professionals to understand and help family members to improve their relationships. Participation in this research is voluntary and **if you decide you do not want to participate, or you decide part-way-through that you want to stop participating, there will be no penalty for doing so. All of the information that we get from you will be kept private, and we will not include your name at any point in our research.**

TO THANK YOU FOR PARTICIPATING WE WILL PAY YOU \$10.00 WHEN WE RECEIVE YOUR COMPLETED QUESTIONNAIRE. THE \$10 WILL BE MAILED TO YOU.

For questions or concerns regarding this study please contact Dr. Jeffry Larson, LMFT, at (801) 422-2344; 274 TLRB Brigham Young University, Provo, UT 84602.

For questions regarding research participants’ rights please contact Dr. Shane Schulthies, Chair of the Human Subjects Institutional Review Board, at (801) 422-5490.

I have read, understood, and received a copy of the above and voluntarily consent to participate in this study.

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Teenager’s Signature/Date

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Parent’s Signature/Date