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# Family Implicit Rules, Shame, and Adolescent Prosocial and Antisocial Behaviors

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# Family Implicit Rules, Shame, and Adolescent Prosocial and Antisocial Behaviors

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ABSTRACT

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This exploratory cross-sectional study examined the relationship between implicit family process rules and adolescent prosocial and antisocial communication behaviors. Data came from two-parent families in wave 5 of the Flourishing Families project which consisted of 322 families (fathers, mothers and children ages 13-17). Both observational and questionnaire data were used in data collection. Prosocial and antisocial behaviors were assessed using observational codes from the Iowa Family Interaction Rating Scales (Melby, et al., 1998). Each of the family members' perceptions were used to assess constraining family rules and facilitative family rules. Findings showed a direct positive relationship between facilitative family process rules and pro-social communication and a negative relationship with antisocial communication. Constraining family process rules were also positively related to antisocial communication behaviors in adolescents. Shame was a significant mediator of the relationship between facilitative family rules and prosocial behavior as well as between constraining family rules and antisocial behavior. Implications for family therapy practice are discussed.

Keywords: family implicit rules, shame, prosocial behavior, antisocial behavior

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## Introduction

Research examining the relationship betweengeneral family processesand adolescent child outcomes has included both positive and negative predictors ofantisocial and prosocial behavior. However, the majority of research regarding antisocial and prosocial behaviors has been defined as conduct related behaviors that are either delinquent behaviors (i.e. substance use, unsafe sex) or positive behaviors meant to benefit others (i.e. empathy, co-operating, volunteering). Melby et al. (1998) offers an alternative definition for both prosocial and antisocial behaviors. They defined prosocial behavior as"ability of an individual to relate competently and effectively with others" (p. 133). This includes behavioral signs of cooperation, sensitivity, helpfulness and a willingness to change and comply with the wishes and needs of others (Melby, et al., 1998). Research has examined how these behaviors are related to developed characteristics of the individual (Fabes, 1999) and to social and contextual influences (Carlo, 1999). According to Melby et al. (1998) antisocial behavior is defined as an individual who,within a relational context, communicates in socially irresponsible ways or acts with age inappropriate behaviors. Portrayals of antisocial communication behaviorscould include noncompliance, insensitivity or obnoxious behavior in interactional contexts (Melby, et al., 1998). Because the focus of this study was on communication behaviors, the alternative definitions,or prosocial and antisocial behavior,offered by Melby et al. (1998) were used in this study.

Although prosocial and antisocial behaviorcan be present before adolescence, associated communication problemsoften manifest themselves in adolescence. It is in adolescence when parents and adolescents begin to pursue different implicit goals and timetables regarding autonomy, which may give rise to communication difficulties (Collins & Luebker, 1994).

However, understanding the development of prosocial values and behaviors lends greater insight to the heightening or suppression of antisocial and prosocial behaviors in adolescence. Prosocial behavior lowers the risk of delinquent behavior (Tarry & Emler, 2007), risky sex (Ludwig & Pittman, 1999), hard drug use (Allen, Leadbeater, & Aber, 1990), as well as being related to lowered anxiety, anger, and trouble at school (Diener & Kim, 2004; Eisenberg, et al., 1996) and increased self-efficacy and self-esteem (Bandura, Caprara, Barbaranelli, Pastorelli & Regalia, 2001; Laible, Carlo, & Roesch, 2004).

Prosocial outcomes in adolescents have been examined empirically and discussed conceptuallyas a byproduct of parental behaviors and attitudes. Most research has focused on how parent-child relationships (Bronte-Tinkew, 2006), parenting style (Holmbeck et al. 1995; Mussen and Eisenberg 2001), and parent's gender (Bronte-Tinkew, 2007) influence prosocial and antisocial outcomes. However,no research has looked at family systems level functioning and its relationship to adolescent prosocial and antisocial communication behaviors. Specifically, family implicit rules, as articulated in family therapy theoretical models, might be family systems dynamic that is related to individual family members' communication behavior.

Family implicit rules have been a part of family therapy theoretical models since the mid-1960's when Jackson (1965) asserted that a family is a rule-governed system meaning that its members behave in organized, repetitive manners, and "such patterns become a governing force in family life" (p. 6). The concept of implicit rules became part of the MRI Approach (Watzlawick, Weakland, & Fisch, 1974), Satir's Communication Approach (Satir, 1983) and Minuchin's Structural Family Therapy (Minuchin, Nichols, & Lee, 2006). Ford (1983) proposed that, "rules provide the connection between family process and individual behavior" (p. 135). Ancillary research adds, "It is believed that implicit family rules underlie the creation and

maintenance of family process" (Stoll, 2004). Family rules can both facilitate or constrain family functioning. The aim of this study wasto examine the relationship between facilitative and constraining process rules and pro-social and antisocial behavior in preadolescent children. In addition, an individual characteristic of the child, internalized shame, will be examined as a potential mediating variable. Two strengths of this study are its longitudinal nature, the use of multiple family respondents, and its use of observational codes of actual prosocial and antisocial communication behaviors in a relational context within the family.

## Literature Review

### Family Processes Related to Adolescent Pro-social Behaviors

For years researchers have investigated how children's behaviors are influenced by parents' actions. Specifically research has shown that parenting styles (Holmbeck et al. 1995; Mussen and Eisenberg 2001), parent child relationship (Bronte-Tinkew, 2006), and parental knowledge (Padilla-Walker, 2012) influence adolescent prosocial outcomes. Research has also been dedicated to the understanding of how parental behaviors such as modeling, authoritative parenting and disciplinary strategies are associated with childhood and adolescent prosocial behaviors (Holmbeck et al. 1995; Mussen and Eisenberg 2001). Recently, Padilla-Walker and colleagues (2012) evaluated over 300 children to investigate how proactive parenting is related to children internalizing values. They examined how proactive parenting influences factors such as drug use, school, friends and prosocial behavior. Findings showed some connections between specific parental behaviors and childhood outcomes but suggested that the general family climate of autonomy might have more influence over internalization of values and subsequent behaviors.

Parents serve as children's primary socialization agents, particularly for moral development and prosocial behavior (Eisenberg and Murphy, 1995). Lawford et al. (2005)

explained that often the parent-child relationship serves as a life-long context for socialization. The influential development of prosocial communication is but a single side of the socialization coin for adolescents. Antisocial communication also likely develops within the context of family systems level processes.

**Antisocial Communication**

The concept of antisocial behavior has been used in family research in many ways. Definitions range from using the term to describe a type of personality disorder to describing delinquency/externalizing behavior to describing a pattern of communication (Murray, 2012). In this study, antisocial behavior wasdefined as an individual's communication in family relationships that is "characteristically self-centered, egocentric, or inappropriate for their age" which tends to disrupt and distract from a smooth relational communication exchange (Melby, et al., 1998). Examples of antisocial behavior include a child who fails to accept responsibility, who is uncooperative, or insensitive to the feelings and needs of others.More specifically a child might declare antisocial communicative behaviors by saying "I'm better than you are at just about everything" or "Mom, you have to help me with my homework. You know I can't do it by myself" (Melby, et al., 1998).

Several family factors have shown some relationship to antisocial behaviors as defined in this study. Until now, it appears that the preponderance of research relating family processes to adolescent prosocial and antisocial behaviors have only investigated parenting variables. For example, Paat (2011) specifically examined how factors, such as financial strain and intrapersonal parental discord, affect childhood antisocial outcomes. Heconcluded that an external factor such as financial strain creates a propensity for antisocial behavior in children. The question then remains that if an external factor has power to influence child antisocial

behavior, does a systemic level process such as family implicit rules have a similar effect?

Feinauer, Larson, & Harper (2010) showed that externalized (i.e. hostility) and internalized (i.e., depression, anxiety) behaviors are associated with family implicit rules. Their study investigated how family process rules are related to specific psychological symptoms in adolescents.The findings suggested that particular types of family process rules,such as those that encourage kindness, expressiveness, and disclosure, were related to lower psychological symptomsin adolescents (p. 63). No empirical research could be found that has examined family systems level variables, such as family implicit rules, and their relationship withadolescent prosocial and antisocial communication behaviors.

**Family Implicit Rules**

Conceptually, many family theorists explain that families are rule-governed systems (Ford, 1983; Gillett, Harper, Larson, Berrett, & Hardman, 2009, Jackson, 1965; Satir, 1988). This means that families interact in redundant ways that become repetitive patterns, and out of those grows a shared but unexpressed understanding about rules or norms that govern family members' behaviors. Rarely are such family rules anything but implicit (Riskin, 1963). Seldom are they written down or recorded like laws or rules put up for the public to see. Examples of implicit family rules would include, "Share your feelings and encourage others to share their feelings" or "Make decisions together as a family", or "Have fun and play together". Over time and with constant repetition, family members come to know what behaviors to expect because the patterns become a shared norm (Ford, 1983). Stoll (2002) stated, "It is believed that implicit family rules underlie the creation and maintenance of family process" (p. 18). Ford (1983) added, "rules provide the connection between family process and individual behavior" (p. 135). To take it one step further, Nuechterlein (1993) explained, "family rules determine behavior to

a greater degree than individual needs, drives, or personality characteristics" (pp. 58-59). It is possible for implicit rules to become explicit, but once that has occurred much of the power of the implicit and implied diminishes because individuals are aware of their choice to follow a rule (Ford, 1974). If implicit rules are part of the rule-governed nature of families, then it follows that family implicit rules would be related to individual family members' communication behavior, specifically prosocial and antisocial communication.

Implicit family process rules can either constrain or facilitate family functioning. Constraining family process rules are those that impede communication, fragment relationships, and deter familial and personal growth (Satir, 1988; Ford, 1983). Specific constraining rules may include, "don't trust yourself, your feelings or conclusions", "don't talk about family relationships with family members" or "don't grow, change, or in any way "rock the family's boat" (Harper, Stoll, & Larsen, 2010, p. 91). These examples highlight rules that create emotional distance between family members. Times when children's needs for emotional closeness or intimacy are not met may create feelings of frustration and unexplained rage (Harper, & Hoopes, 1990). Consequently, the manifestation of unexplained rage and frustration for children can happen anywhere and can result in tantrums or ill-timed behavioral outburst even in public places. Presence of constraining family rules are likely related to implied distance between family members which, in turn, may influence the quantity of antisocial communication in children who are frustrated by a distance that is neither acknowledged or labeled but is felt.

**Facilitative Rules**

Facilitative family process rules are those that are flexible, promote openness, confirm all family members' intrinsic self-worth and dignity, encourage acceptance and love, serve the entire family, and promote discovery of appropriate, functional, and acceptable behaviors

(Hoopes & Harper, 1992; Nuechterlein, 1993; Satir, 1988). Family settings where such facilitative rules can be found likelyserve as an incubator for the growth of prosocial communication in children. They provideopenness and safety that children need for emotional development with little risk of negative consequences. Simultaneously, such rules buffer or impede development of antisocial communication.Examples of facilitative rules include, "be sensitive to others", "stand up for others in the family" or "show physical affection within the family" (Harper, Stoll, & Larsen, 2010, p. 91). As part of the examples of the rules listed above, there is a theme that invites family closeness and togetherness. The acceptance of emotional expression and thus emotional closeness is one potential theme resulting from facilitative family process rules. Children who feel the freedom of emotional expression and acceptance in doing so may be more productive within the family. For example, a child who receives the message that sharing emotion is accepted in the family may turn to family for emotion support rather than seeking out possible negative coping means. Hoopes and Harper (1992) explained that facilitative family process rules not only encourage intimacy and provide emotional support, but they also facilitate greater family functioning by enabling everyday tasks get accomplished and by encouraging dependency and autonomy. Fostering a cooperation to accomplish family tasks as well as sensitivity through emotional closeness are but two indications of the development of prosocial behavior in preadolescent children

**Constraining Rules**

Constraining family implicit rules, on the other hand, are related to suppressing family members' expression of feelings and thoughts. Examples include "Don't share your feelings or thoughts with other family members", "Be careful to say the right thing when you open your mouth", or "Lie, if necessary, to keep family secrets" (Melby, et al., 1998). Blevins (1993)

believed that constraining family implicit rules produce“dis-ease” among family members. Subsequent consequences of the presence and repetition of constraining family rules include rebellion and chaos, fragmented relationships, alienation, interference with communication,and with family growth as well as personal growth (Blevins, 1993; Hoopes & Harper, 1990; Nuechterlein, 1993; Satir, 1988) It then follows logically that constraining rules would benegatively related to prosocial communication. Other examples of constraining rules include “Blame others in the family” and “Don’t trust others” (Melby, et al., 1998). Such rule likely lead to antisocial communication behavior, or a communication style that is disruptive and inhibits the flow of information with others.

**Shame as a Mediational Process**

While shame has been used frequently as an outcome variable, some studies have used it as a mediator in the case of childhood sexual abuse (Donhauser, 2008) and sexually abused women (Hamilton, 2013). Both of the aforementioned studies illustrate the possible benefits of shame as a mediator and not just an outcome variable. Shame as a mediator in the current study is conceptualized that helps explain how family process rules might be related to adolescent communication outcomes.

Experiencingshame is as much a part of the human experience as is eating.Tompkins (1963) and others (Barret, 1995; Nathanson, 1992; Nathanson, 1997) conceptualized the neurological capacity for shame as present in day old infants. Some amounts of shame can prove to be positive as it may be used for “socialization and teach norms important for survival and interpersonal skills” (Harper & Hoopes, 1990). Transitory shame, however, is most often identified as humiliation, embarrassment, and fallen pride (Kaufman, 1996). Given these descriptions of shame, it is likely that internalized shame may develop out of constraining family

rules that suppress the expression of feelings, and, in turn, the resulting internalized shame in adolescents may be related to antisocial communication behaviors. It is also likely that facilitative family process rules inhibit the development of internalized shame and that shame is inversely related to prosocial communication behaviors. When people experience repeated instances of shame they develop internalized shame which becomes a part of their negative identification of self. These individuals feel flawed inside and try to hide their personal flaws from others. This "hiding" aspect of internalized shame may have some influence over quality of interactions that individuals have with others and in particular those in their own family.

According to several theorists (Harper & Hoopes, 1990; Kaufman, 1996) the internalization of shame begins in early family life and is developed through the dynamics of interpersonal relationships. Kaufman (1996) suggests that individuals progress through 4 stages before finally internalizing shame. The first includes self-contempt, self-blaming, and negative comparisons to others. Secondly, they begin to disown feelings and attachment needs. During the third stage called splitting, they consider themselves as bad and others as good. In the final stage,individuals assume that shame is a part of their identity. Miller (2008) described one danger of internalized shame inthat individuals present a false self to others, one in which their internal experience of self and world are incongruent with what they show to others.

**Theoretical Foundation**

The theoretical foundation for family implicit rules comes from the general systems theory (Broderick, 1993). Many family therapy models (Bavelas, & Segal, 1982; Epstein, Schlesinger & Dryden, 1988; Satir, 1983) have conceptualized family implicit rules as an important factor in family functioning. More specifically, the creation of family implicit rules isbest understood through the systemic concepts of redundancy, feedback loops, and social co-

construction.One of Rappaport's (1971) six cybernetic aspects is repetition or redundancy. He explained that meaning through repetition in family process is done in action, form and content. This would help explain how creation of systemic family process rules and shame are active creations in a family. Even in ever changing family systems, Balmer (1977) highlighted that, with each change, the system only seeks to establish new redundant patterns of interaction that define the nature of their relationship. Feedback loops explain the development and maintenance of family implicit rules.

Feedback loops are communication cycles by which individuals influence each other verbally and non-verbally. Human functioning emerges from the interaction of innumerable intrapersonal and interpersonal feedback loops (Gunner, 2006). The redundancy of feedback loops may eventually contribute to the establishment of rules for interaction amongst family members.

Social co-construction in context of family implicit rules is the idea that these unspoken family rulesdevelop out of interaction among all of the family members (Hoopes and Harper 1992). Family implicit rules are so universally understood by each family member that if one of the family members breaks implicit rule, the verbal, nonverbal, and emotional reactions of the other family members would pressure the "rule breaker" to fall back into compliance with the implicit rule (Feinauer, Larson, & Harper, 2010). Each member of the family takes responsibility for the creation and the enforcement of family implicit rules. In other words, rules, when co-constructed, become less about what the parent dyad imposes or influences on the children and more about a holistic functionality of parent and child interaction that creates rules for engagement in the family.

A brief example may be found in an interaction between mother and daughter where the mother repeatedly becomes emotional during conversations with her daughter. In response to her emotion, the mother leaves for another room tocry and sooth herself. Frequent repetitions may lead to the daughter deciding it is not acceptable to show emotion publicly. Eventually the daughter learns to feel uncomfortable to share emotional experiences with others. Redundancy in their interactions eventually shapes the rules for their interaction. Another sibling has similar experiences. Consequently, when he interacts with his mother and becomes emotional, he follows the patterns of behavior which have shaped through nonverbal feedback loops. His uneasiness with the expression of emotion is accepted by the mother as she does not pursue him to hash out the issue. The family process rule about not being emotional with each otheris then established.Overtime, these rules not only create an implied systemic level dialog, but also create individual messages that each member of the family tells themselves about others in relation to self and their own value.Children in this family may reach out initially for connection and intimacy with a parent, but do not receive it on account of the rules that have been set. Over time and after repeated attempts for closeness, children may rationalize that it is not their behavior that is wrong, but that they are a person who is unlovable.

Harper and Hoopes (1990) describe this continuous and repetitive negative evaluation of one's self as shame. Within the family context, shame facilitates hurt, anger, and discouragement (p. 73), and manifests itself through individuals who "internally want to disappear, be someone else, erase the present, and back up time to undo what is shameful" (p. 7). Shame may not be the catalyst for the creation of family process rules, but once it becomes a part of the process it serves as a conductor through which implied rules may be maintained.It is hypothesized that

shame is a mediating individual characteristic that is negatively associated with prosocial behaviors and positively associated with antisocial communicative behaviors.

**Aim of the Study**

One aim of this study was to examine the relationship between facilitative and constraining process rules and prosocial and antisocial behavior in preadolescent children. In addition, an individual characteristic of the child, internalized shame, will be examined as a potential mediating variable. This study is unique in its longitudinal use of data, multiple respondents, as well as its use of both questionnaire and observationally coded data. It was hypothesized that (1) facilitative family process rules will be positively related to adolescent prosocial communication, (2) facilitative family process rules will be negatively related to antisocial communication behaviors in adolescents (3) constraining family process rules will be positively related to antisocial communication in adolescents, (4) constraining family process rules will be negatively related to prosocial behaviors in adolescents, (5a) shame will be a significant mediating variable between facilitative family process rules and prosocial communication behavior in adolescents, and (5b) shame will be a significant mediating variable between facilitative family process rules and antisocial communication behavior in adolescents, and (6a) shame will be a significant mediating variable between constraining family process rules and antisocial communication behavior in adolescents, and (6b) shame will a significant mediating variable between constraining family process rules and prosocial communication behavior in adolescents.

## Method

### Participants

The participants for this study were taken from wave 5 of the *Flourishing Families Project (FFP)*, a longitudinal study of inner-family life involving families with a child between the ages of 13 and 18. Other waves of data in the study were not used because measures for internalized shame and observational data for prosocial and antisocial communication was not collected in other waves. The sample consisted of 463 families (92.6% retention from wave 1) with a child within the target range (311 two-parent families and 151 single-parent families). The current study utilized only the two-parent sample in its analysis. As shown in Table 1, participant children averaged 15.3 years of age, while mothers averaged 44.3 years and fathers average 46.2 years in age. Two hundred ninety-eight families were of European American ethnicity, 56 were African American, with smaller number for Hispanics (1) and Asian Americans (4). Eighty-nine families are categorized as multi-ethnic, based on a combination of two or more ethnicities among family members. In terms of parental education, 61% of mothers and approximately 70% of fathers had a bachelor's degree or higher. Related to yearly family income, 19.8% of families reported making less than $59,000; 19.8% reported income in the $60,000-99,000; 22.8% reported income in the $100,000-149,000, with another 16.2% making $150,000 or more per year. Approximately, 29.8% of single parents reported being never-married, 46.4% divorced, 15.2% cohabiting, 4% widowed, and 4.6% not cohabiting but in a committed relationship.

### Procedure

All participants were randomlyselected from the Seattle Metropolitan area. Primary recruiting of these families was done through a purchased national telephone survey database (Polk Directories/info USA). The database claimed to contain detailed information for 82

million households from across the United States. Examples of the information that was included in the database included socioeconomic status, age of children and race for the families. Families were then randomly selected from census tracts matched to the Polk directory where socio-economic and racial stratification of reports lined up with that of local school districts. All families with children ages 10 to 14 were deemed eligible to participate in the study. Six hundred and ninety two families met the criteria and were contacted. Of that original number, 423 agreed to participate (a 61% response rate). However, The Polk database generated information using telephone, magazine, and Internet subscriptions. Due to the nature of this data collection, low socioeconomic status families were under represented. In order to more accurately represent the population of the city surveyed, additional recruiting of lower socioeconomic families was performed which produced an additional 77 participating families (15% of total sample).

Families were all contacted by use of a multi-stage recruitment procedure. First, this included sending a letter of introduction to potentially eligible families. The initial contact was followed up on by sending interviewers to make home visits and phone calls to confirm eligibility and willingness to participate in the study. After interviewers successfully established eligibility and consent, interviewers set appointments to return to the family's home to conduct an assessment interview that included video-taped interactions as well as additional questionnaires that were completed in the home. Families who decided not to participate in the study cited concerns about privacy and lack of time. Very little data were missing due to a check and double check screening system employed by interviewers for missing answers.

**Measures**

Specific codes from the Iowa Family Interaction Rating Scales (Melby, et al., 1998) were used to create a latent outcome variable called prosocial behavior. The individual codes that

comprise the latent variable came as a result of coding actual parent-child interactions from wave 5. The codes that make up the pro-social behavior latent variable were warmth (WM), pro-social (PR), Listener responsiveness (LR), Communication (CO) and assertiveness (AR).

Warmth was defined, according to the Iowa Family Interaction Rating Scale, as "the degree to which the individual expresses liking, appreciation, praise, care, concern, or support for the other person". Take into account three types of behavior: Nonverbal communication, such as affectionate touching, kissing, and offering encouragement, and praise: and content, such as statements of affirmation, empathy, liking, appreciation, care and concern (Melby et al., 1998, p. 101).

Prosocial was defined, according to the Iowa Family Interaction Rating Scale, as "the extent to which the focal relates competently and effectively with others". It includes demonstrations of cooperation, sensitivity, helpfulness, willingness to change own behavior for the other, and willingness to comply with needs and wishes of others (Melby et al., 1998, p. 133).

Listener Responsiveness was defined, according to the Iowa Family Interaction Rating Scale, as "the degree to which the focal attends to, shows interest in, acknowledges, and validates the verbalizations of the other person (the speaker) through the use of nonverbal backchannels and verbal assents". A responsive listener is oriented to the speaker and makes the speaker feel that he/she is being listened to rather than feeling like he/she is talking to a blank wall. The listener conveys to the speaker that he/she is interested in what the speaker has to say (Melby et al., 1998, p. 125).

Communication was defined, according to the Iowa Family Interaction Rating Scale, as "the extent to which a focal (participant) conveys in a neutral or positive manner his/her needs

and wants, rules and regulations, as well as clearly express information and ideas that may be useful to others". Communication entails the use of explanations and clarifications; the use of reason; soliciting the other's views or in some way demonstrating consideration of the other's point of view; encouraging the other to explain and clarify his/her point of view; and responding reasonably and appropriately to the ongoing conversation (Melby et al., 1998, p. 129)". Assertiveness was defined, according to the Iowa Family Interaction Rating Scale, as "the degree to which the focal displays confidence and forthrightness while expressing self through clear, appropriate and neutral or positive avenues and exhibits self-confidence, persistence, and patience with the responses of the other" (Melby et al., 1998, p. 121).

A latent variable called Antisocial Behavior was created using co-scales from the Iowa Family Interaction Rating Scales (Melby, et al., 1998). The specific codes that make up this latent variable were hostility, contempt, antisocial, and denial.

Hostility was defined, according to the Iowa Family Interaction Rating Scale, as "the degree to which the focal (participant) displays hostile, angry, critical, disapproving and/or rejecting behavior toward another interactor's behavior (actions), appearance, or state". Take the following behaviors into account: nonverbal communication, such as angry or contemptuous facial expression and menacing/threatening body posture; emotional expression, such as irritable, sarcastic, or curt tones of voice or shouting; rejection, such as actively ignoring the other, showing contempt or disgust for the other or the other's behavior, denying the other's needs; and the content of the statements themselves, such as complaints about the other or denigrating or critical remarks, e.g., "you don't know anything" or "you could never manage that". Bear in mind that two people can disagree without being hostile. To be hostile, disagreements must

include some element of negative affect such as derogation, disapproval, blame, ridicule, etc. (Melby et al., 1998, p. 55).

Contempt was defined, according to the Iowa Family Interaction Rating Scale, as "a specific form of hostility that assesses the amount of disgust, disdain, derision, and scorn shown toward another interactor". The content includes personally derogatory adjectives, mocking statements, criticisms of the other person, comments that put down and demean another's characteristics, and sarcasm directed toward the other person as a person. The emotional tone is superior, condescending, distant, cool, cold, or icy versus hot and engaged. At higher levels, the voice reflects being fed-up, sickened or repulsed. At lower levels the affective tone may be neutral, but the voice reflects patronization and superiority. The feeling conveyed is that the other person in not valued or is incompetent. Nonverbal behaviors may include rolling the eyes, short exasperated sighs, or other indications of disgust (Melby et al., 1998, p. 69).

Antisocial was defined, according to the Iowa Family Interaction Rating Scale, as "the degree to which the focal demonstrates socially irresponsible or age inappropriate behaviors". It includes when a focal resists, defies, or is inconsiderate of others by being noncompliant, insensitive, or obnoxious, as well as when the focal is uncooperative and unsociable. The antisocial person is characteristically self-centered, egocentric, tends to behave in inappropriate ways, or in some other way demonstrates lack of age-appropriate behaviors. This scale includes both immaturity conveyed as acting out behavior and as withdrawn behavior (Melby et al., 1998, p. 137)".

Denial was defined, according to the Iowa Family Interaction Rating Scale, as the "focal's active rejection of the existence of a given situation or personal responsibility for a situation being discussed, code the presence of statements that excuses one's behavior, deny

responsibility for blame or cast blame into someone or something else with the apparent intent of making the other realize "it's not my fault", or "I've no control over it." The focal may explicitly or implicitly deny that he/she is responsible for a past or present situation or may blame others for the existence of a problem. Often such denial will be done in a defensive manner. In the extreme case, the focal may deny the existence of a problem that clearly seems to exist based on other contextual clues (Melby et al., 1998, p. 97).

**Family Implicit Rules**

Two latent variables, facilitative family process rules and constraining family process rules, were created using subscales from the *Family Implicit Rules Profile* (Harper, Stoll, &Larsen, 2010)which was used to assess family implicit rules. Using a 5-point Likert scale ranging from 1(*never*) to 5(*most of the time*), both the mother and father were asked to respond to how much 30 implicit rules operated in their family. This measure contains four subscales: kindness (Cronbach's Alpha=.84), expressiveness and shared problem solving (.94), monitoring (.88) and false image and constraining feelings/thoughts (.92). The mother's and father's reports on kindness, expressiveness and shared problem solving, and monitoring subscale scores will be used as 6 indicators (3 subscale scores times 2 parents) to create a latent variable called facilitating family implicit rules. Sample items include "be gentle with others" (kindness), "make decisions as a family" (expressiveness and shared decision making), and "Let family members know who your friends are" (Monitoring).

To create a latent variable called constraining implicit family rules, the mother's and father's reports for the 12 items on this subscale will be used. The mean score for the mother's items will be one indicator, and the mean score for the father's items will be the other indicator.

A sample item from the constraint subscale is "Do not trust yourself, your feelings, or your conclusions".

The original reliability coefficients for these subscales were .84 (kindness), .94 (expressiveness & shared problem solving, .88 (monitoring), and .92 (false image and constraining feelings/thoughts). Reliability coefficients in this sample for waves 3 and 4 respectively were .78/.74 (mothers)and.80/.77 (fathers) for kindness; .82/.81 (mothers) and .84/.85 (fathers) for expressiveness and shared problem solving; .73/.77 (mothers) and .76/.84 (fathers for monitoring; and .67/.68 (mothers) and .62/.67 (fathers for false image and constraining feelings/thoughts.

Validity for the Family Implicit Rules Profile was originally established in three ways. First, the original items were given to three expert judges who evaluated the items along two dimensions: how well they represented important family implicit rules from systems theory literature and how clearly worded the rules were. Items that did not meet the first criteria were dropped, and if items didn't meet the second criteria, they were reworded thus establishing content validity. Concurrent validity was examined by correlating the subscale scores from the Family Implicit Rules Profile with subscale scores from the Systems Functioning Scales (Beavers, et. al., 2000).Factor validity was examined using confirmatory factor analysis to determine how well the items loaded onto the 4 subscales, and items that did not load above .50 were dropped leaving the 30 item version used in this study. It appears that this measure has adequate reliability and validity for use in research.

**Shame**

A latent variable called adolescent internalized shame was created using eight items from the inferiority subscale of the Internalized Shame Scale (Cook, 2001) Participating adolescents

answered 8 items using a 5-point Likert scale ranging from 1(*never*) to 5 (*almost always*) with higher scores representing higher levels of shame. Potential participant scores ranged from 8 to 40. Sample items include "Ifeel like I am never quite good enough", "Isee myself as being very small and insignificant", and "I feel as if I am somehow defective as a person". Cook (2001) reported the reliability coefficient for this subscale as .80, and in this sample reliability coefficient was .92.

Concurrent validity for the ISS has been established in several studies. Harder, Cutler, & Rockart (1992) compared the overall shame scale of the ISS with theshame subscale of PFQ and the shame subscale of the SCAAI and determinedthat the correlations were .63 and .52 respectively. Construct validity for ISS was established by Rybak & Brown (1996) in a study in which they showed that thescores from the ISS shame scale were highly correlated with anxiety, hostility, depression, and negatively correlated with positive affect.

Psychometric studies of the ISS have used samples from both clinical and non-clinical populations. Akashi (1994) obtained a sample of 336 adult outpatientsfrom adult clinics in Columbus, Ohio. She reported that the shame scale of the ISSwas related to several scales from the Symptom Checklist - 90 (Deragotis, 1992)including Depression (.71), Somatisim (.45), Obsessive-Compulsive (.61), Inter personal Sensitivity (.74), Anxiety (.62), Hostility (.51), Psychoticism (.72), PhobicAnxiety (.55), and Paranoid Ideation (.61). The ISS Technical Manual (Cook,2001) reports several samples which were taken from clinical populations.

**Control Variables**

Several variables were used as control variables includingchild age, number of siblings, father's education, mother's education and income. However, none of the control variables were significantly related to the other variables.

**Training of Observational Coders**

Observational coders were trained to accurately identify and rate both the parent and the adolescents' behaviors from a score of 1 *(not at all characteristic in the task*) and 9 (*mainly characteristic of the task*). During a 90-hour training process coders were required to show mastery, through tests on content of scales and practice tasks with consensus and input of certified coders, of the coding system. The coding manual provides detailed descriptions and examples for each scale. To become certified as a project coder, and subsequently be qualified to code for research, each coder had to reach criterion (80% inter rater reliability) for a task that had previously been coded by certified coders from the Iowa Behavioral and Social Science Research Institute. Twenty-five percent of the tasks were randomly assigned to a second reliability coder. Tasks were assigned in such a way that none of the coders were aware of which tasks would be second coded.

**Analysis**

The measurement and SEM model are shown in Figure 1.The SEM model was preferred in this study because it allowed for three things:controlling for measurement error, assessing structural components including indirect paths, and allowing latent variables with multiple respondents among family members. First, means, standard deviations, and correlations were computed for boys and girls. The correlations between the exogenous variables of implicit facilitating family rules and implicit constraining rules were examined. None of these correlations were higher than .70 so we proceeded assuming it was unlikely that multi-collinearity problems exist. Next confirmatory factor analysis was used to determine how well the measures loaded onto their respective latent variables. None of the factor loadings were below .50 so all of the indicators were kept in the model. Lastly, using AMOS, multiple group

comparison was used to examine the differences between boys and girls in the structural relationships between implicit facilitative and constraining family rules and observed pro-social and antisocial communication behaviors in adolescents as well as the indirect paths through the adolescents' internalized shame as a potential mediating variable. Invariance testing was done first constraining factor loadings to be equal, then intercepts to be equal, then error terms to be equal, and finally structural paths in the model to be equal.

## Results

### Mean Scores and Correlations

Mean scores for all measured variables are shown in Table 2. The mean scores for indicators of the latent variable "facilitating family implicit rules" were mother report-kindness with boys 3.97(SD=.52) and with girls 4.05(SD=.50), mother report-expressiveness with boys 3.77(SD=.62) and with girls 3.85(SD=.64), mother report-monitoring with boys 4.43(SD=.52) and with girls 4.50(SD=.47), father report-kindness with boys 3.97(SD=.52) and with girls 3.97(SD=.52), father report-expressiveness with boys 3.58(SD=.62) and with girls 3.59(SD=.65), and father report-monitoring with boys 4.29(SD=.51) and with girls 4.32(SD=.57).The mean scores for indicators of constraining family implicit rules were mother's report with boys 2.16(SD=.40) and with girls 2.13(SD=.40) and father's report with boys 1.78(SD=.42) and with girls 2.26(SD=.39).

Notable mean subscale scores for prosocial behavior with mother for boys and girls was prosocial 3.06(SD=1.01) and 3.08(SD=1.30), and communication 4.11(SD=1.14) and 3.81(SD=1.24) respectively. Additionally, mean subscale scores for prosocial behavior with father for boys and girls was prosocial 2.76(SD=.95) and 2.87(SD=1.11), and communication 3.76(SD=1.15) and 3.63(SD=1.35) respectively.Notable mean subscale score for antisocial

behavior with mother for boys and girls was antisocial 2.33(SD=1.85) and 2.46(SD=1.95) respectively. Additionally, mean subscale scores for antisocial behavior with father for boys and girls antisocial 1.98(SD=1.69) and 2.23(SD=1.71) respectively

The mean score for adolescent shame of boys was 1.78(SD=.83) and girls was 2.05(SD=.96)

Table 3 shows the correlations between all latent variables in the study. Constraining family implicit rules were significantly correlated with antisocial behavior with the mother, ($r$ =.28, $p$< .001), antisocial behavior with the father ($r$ = .26, $p$< .001), and shame ($r$ = .36, $p$< .001). Facilitative implicit family rules were correlated with prosocial behavior with the mother ($r$ =34, $p$< .001), prosocial behavior with the father ($r$ = .44, $p$< .001), and shame ($r$ = .26, $p$< .01).Facilitative implicit family rules were also significant correlated with adolescent shame ($r$ = -.32, $p$< .001), antisocial behavior with mother ($r$ = -.21, $p$< .01), and antisocial behavior with father ($r$ = -.19, $p$< .05). Constraining family implicit rules were also inversely correlations with prosocial behavior with mother ($r$ = -.48, $p$< .001), and prosocial behavior with father ($r$ =-.36, $p$< .001). Shame was significantly correlated with prosocial behavior with mother ($r$ =-.23, $p$< .01), prosocial behavior with father ($r$ =-.21, $p$< .01), antisocial behavior with mother ($r$ =.20, $p$< .05), and antisocial behavior with father ($r$ =.21, $p$< .01),

**Path Model Results**

As shown in Figure 2, the goodness of fit analysis indicated that the hypothesized model had excellent fit with the data. The chi-square was 555.23, and the degrees of freedom were 502 ($p$ = .06), which should be insignificant for good fit. The Comparative Fit Index (CFI) was .982 and above 0.95 for excellent fit. The Root Mean Square Error of Approximation (RMSEA) was

0.030, which is well below the .05 cutoff for adequate fit. The Standardized Root Mean Square Residual (SRMR) was .038, which is well below the .08 cutoff for adequate fit (Kline, 2010).

Child's age, number of siblings, race, parents' education and household income were all used as control variables in this model, but none of the paths were statistically significant so they are not shown in the model.

Results indicated that facilitating implicit family rules was a significant predictor of adolescent prosocial behavior with mother for both girls and boys ($\beta$ = .20, $p$ <.01 and β=.34, $p$<.001, respectively), adolescent prosocial behavior with father for both girls and boys ($\beta$ = .47, $p$ <.001and β=.22, $p$<.01, respectively),adolescent antisocial behavior with mother for both girls and boys ($\beta$ = -.24, $p$ <.01 and β=-.18, $p$<.05, respectively), and adolescent antisocial behavior with father for both girls and boys ($\beta$ = -.24, $p$ <.01 and β=-.21, p<.01, respectively).

The construct of constraining implicit family rules was a significant predictor of adolescent antisocial behavior with mother for both girls and boys ($\beta$ = .57, $p$ <.001and $\beta$ = .46, $p$ <.001), and adolescent antisocial behavior with father for both girls and boys ($\beta$ = .49, $p$ <.001and $\beta$ = .25, $p$ <.001),adolescentprosocial behavior with mother for both girls and boys($\beta$ = -.73, $p$ <.001and $\beta$ = -.69, $p$ <.001), and adolescent prosocial behavior with father for girls and boys ($\beta$ =-.70, $p$ <.001and $\beta$ = -.68, $p$ <.001),

Results indicated that shame was significantly related to for prosocial behavior with mother for both girls and boys ($\beta$ = -.26, $p$ <.01and $\beta$ = -.23, $p$ <.01, respectively) and father for both girls and boys($\beta$ = -.33, $p$ <.001and $\beta$ = -.29, $p$ <.001, respectively). Also, results indicated that shame was significantly related to antisocial behavior with mother for both girls and boys ($\beta$ = .22, $p$ <.05 and $\beta$ = .19, $p$ <.05, respectively) and father for both girls and boys ($\beta$ = .20, $p$ <.05and $\beta$ = .18$p$ <.05, respectively).

To assess gender differences, a fully constrained model was compared to a fully unconstrained model. First, invariance testing allowed for constraining factor loadings to be equal. The resulting $X^2$ difference tests were then examined at each step to determine if each aspect of measurement could be left constrained. Next, intercepts were constrained to be equal and lastly, error terms were constrained to be equal. Resulting $X^2$ difference tests showed that the measurement indices (factor loadings, intercepts, and error terms) could be assumed to be equal. Lastly, structural paths were constrained to be equal, and the $X^2$ difference test indicated that the constrained and unconstrained models were significantly different from each other ($X^2=28.33$, $df$=17, $p$<.05). The constraint on each path was then released one at a time until the best model fit was reached. In that model the paths from facilitating implicit family rules to adolescent prosocial behavior with motherwas stronger for boys (.32 vs. .20), and the path from facilitating implicit family rules to adolescent prosocial behavior with father was stronger for girls (.47 vs. .22). The path from facilitating rules to adolescent shame was also stronger for boys (-.44 vs. -.22). The paths from constraining implicit family rules to adolescent antisocial behavior with mother and antisocial behavior with father were both stronger for girls than boys (.57 vs. .46 and .49 vs. .25, respectively). The path from constraining rules to adolescent shame was stronger for girls than for boys (.55 vs. .34).

To test for mediation, Sobel tests were used. This was because AMOS does not allow for bootstrapping when there is missing data.As can be seen in Table 4, adolescent internalized shame was a significant mediating variable for all paths in the model for both girls and boys.

## Discussion

Findings in the current study supported the first hypothesis that there would be a direct relationship between facilitative family process rules and pro-social communication. This finding

provides empirical support for the conceptual idea of Harper and Hoopes (1990) that when facilitative rules are present in a family there is space for greater emotional connection and closeness. It is likely that the very nature of facilitative rules (i.e. “be sensitive to others”, “stand up for others in the family” (Melby et al., 1998)establish guidelines for more emotional expression and more connection. This finding also lends credibility to the general systems idea that family level processes are related to individual family members’ behaviors.

Further, findings discovered that facilitative family process rules were also negatively related to antisocial communication behaviors. This would mean that the more a family emphasizes rules like “be sensitive to others”, “stand up for others in the family” or “show physical affection within the family” (Harper, Stoll, & Larsen, 2010, p. 91) the less you will see patterns of self-centered or egocentric communication behaviors. This seems to support the notion presented by Nuechterlein (1993) that “family rules determine behavior to a greater degree than individual needs, drives, or personality characteristics” (pp. 58-59). A possible explanation, and maybe oversimplified one, resides in the image of a single cup as a representation for a child. Familial interaction and the rules that govern that interaction consistently are filling up that cup. As the cup fills with positive messages from the family interactions the less room there exists for negative messages. A cup full of positive messages (i.e. facilitative family process rules) provides greater possibilities for more positive outcomes.

The findings of this study also supported the third hypothesis that constraining family process rules would be positively related to antisocial communication behaviors in adolescents.The current findings support those of both Satir (1988) and Nuechterlein (1993) that constraining family rules inhibit forms of communication and this study shows that they

specifically influence antisocial communication.It is possible that the nature ofconstraining family rules (i.e.don't share your feelings or thoughts with other family members", "Be careful to say the right thing when you open your mouth" (Melby et al., 1998) are rules that set boundaries for emotional distance between family members.In a very real sense the more that families reinforce these types of rules the more emotional distance they may be creating with their children. Consequently, they may find that an already reluctant child becomes even less open and honest in their communication with others and self (Harper & Hoopes, 1990). Additionally, higher levels of antisocial communication would also mean that the individual is listening less to others, is less responsive and facilitative of others wants and needs to communicate with them.

It was also found that constraining family process rules were negatively related to prosocial behaviors in adolescents. This finding supports previous research by Nuechterlein (1993), Blevins (1993) and Harper and Hoopes (1990) that constraining family implicit rules dictate feelings, thoughts and behaviors to a point where it interferes with communication, produces fragmented relationships, alienation, impedes familial and personal growth, and maintains dysfunction in families. Further, Nuechterlein (1993) added that constraining family process rules dictate behavior rather than serve as a guideline for an individual's life. It is possible that the repetition of emotional boundary limitations set by constraining family process rules (i.e. don't share your feelings or thoughts with others) not only reinforce antisocial communication behaviors, but also impede the growth and development of alternative prosocial communication behaviors (i.e. cooperation, helpfulness or sensitivity).

The current study showed that shame was a significant mediating variable between facilitative family process rules and prosocial communication behavior in adolescents. The lower

measured amounts of shame tended to occur with higher levels of prosocial behaviors in interactions with both parents. These findings support the theory of Harper and Hoopes (1990) that family process would be related to shame in individual members (Harper & Hoopes, 1990). The current study expands on that idea of Harper and Hoopes (1990) by showing shame is not just influenced by a family level process but that it may account for the relationship between two family level processes such as family implicit rules and adolescent communication.The strengths of the paths between shame and the mother's interaction with the child and shame and the father's interaction with the child for both prosocial and antisocial behavior outcomes did not appear to be significantly different. The lack of difference supports the idea that the family systems levels rules are related to individual family member behavior regardless of the dyadic context in which it occurs.

The last hypothesis that stated shame would be a significant mediating variable between constraining family process rules and antisocial communication behavior in adolescents was supported by the findings in the current study. In fact, higher levels of antisocial communication behaviors for the child and parent interaction were observed when higher reports of shame were measured.This is not to say that shame produces more antisocial communication or vice versa, but rather that shame accounts significantly for a relationship between antisocial communication and constraining family implicit rules. Kaufman (1996) described transitory shame as humiliation, embarrassment, and fallen pride. These attributes may very likely serve a vehicle through which constraining family implicit rules influence disruptive or antisocial adolescent communication.The current findings support the theoretical offerings of Harper and Hoopes (1990) that within the family context, shame facilitates hurt, anger, and discouragement. All of which, are communication qualities that may lend themselves more toward resistance, defiance,

being inconsiderate of others, insensitivity, obnoxiousness or being unsociable when relating competently and effectively with others.

Theorists (Harper & Hoopes, 1990; Kaufman, 1996) first suggested that the internalization of shame develops through the dynamics of interpersonal relationships early on in family life. The findings of this study build onto the postulates of those theorists by suggesting that shame, as a mediator, does not just begin to develop within the family system, but also influences the possible trajectory for both prosocial and antisocial communication behaviors in adolescents. Specific trajectories that have been linked with shame include, overt aggression in school (Åslund, 2009), bullying (Meier, 2003), victimization (Meier, 2003), and self-harming (Flett et al., 2012).Within the contextual frame work of prosocial and antisocial communication behaviors, possible consequential trajectories for the development of shame may include dating, marriage selection or even success in the workplace, which are all context that are heavily influenced by communication.

## Clinical Implications

The findings of this study fit well with systemic family therapy and, more specifically, Salvador Minuchin's model for structural family therapy (2004) wherein he focuses on the inclusion of all family members. He suggests that clinicians must look beyond the individual and gaze upon the geographical territory of the family (Minuchin, 2004). Each member of the family becomes an important part of understanding the formation and reinforcement of facilitative or constraining family implicit rules. When crisis or stirring events arise for a family, they are often quick to scapegoat the problem to a single individual in the family. When that family calls into a clinician's office, this is an easily noticeable concept. The Family Implicit Rules Profile assessment would be a valid and useful way of commencing the assessment portion of treatment

(Harper, Stoll, &Larsen, 2010). The assessment would prove to be comprehensive in nature as well as support the findings of this study that it is not just vital to understanding relationship issues that form but rather the entire systemic dynamic in the family. To coin a phrase from Carl Whitaker and William Bumberry (1988) the therapist must commence in the process of"dancing with the family" in order understand the full scope of family issues and consequent family solutions. Leaving any family members out of the process would be consequential for the progression and development of the family system and each of their members.

Once the clinician has an inkling that either constraining or facilitative family rules are a part of family functioning they must take special care to asses for elements of shame in the children. At that point, constraining rules which have the most negative influence on shame need to be brought to the surface. When implicit rules are made explicit they lose much of the power that they had (Ford, 1974). Restructuring family rules can then begin by not only making implicit constraining rules explicit, but by also reinforcing the facilitative family implicit rules without making them too explicit. Further, therapist should ensure that proper levels of dependency, accountability and intimacy in the family. Those three constructs for family system functioning serve as an incubator wherein facilitative family rules can influence the proper socialization and growth of children (Harper & Hoopes, 1990)

One of the most difficult things about working with shame, and maybe one of the reasons why it is not addressed more in therapy, is that it has the ability to trigger shame in the therapist as well as the client (Harper & Hoopes, 1990). When a clinician is working with a client that is dealing with their own issues of shame, the therapist is faced with a sense their own shame or shame they have felt. If they deny or ignore that shame, they will find that their ability to help clients progress is lacking. It becomes crucial that clinicians seek consultation or help from

others outside of the client-therapist relationship (Fossom and Mason, 1986). Harper and Hoopes (1990) explained that clinicians should be on the lookout for warning signs that may indicate that shame is likely involved. Examples of such warning signs would include, the therapist being uncomfortable with their own feelings toward the client but deny it, the therapist withdraws emotionally during session, the therapist becomes codependent or displays inappropriate caretaking, or therapist experiences increased self-doubt of self-blaming for the lack of client progress.

## Future Directions for Research

As this study was afirst in that it bridges the gap between family process interaction and adolescent outcomes, there remains a surplus of opportunities for future directions. One in particular would be to use a longitudinal sample to measure changes over time and understand possible trajectories for development during all of adolescence. It would also be useful to understand how early family process rules begin to influence prosocial and antisocial communication and how those might be affected by such factors such as socioeconomic status, birth order, single-parent vs., two parent families, or even gender.

On account of the lack of significant diversity in the sampled population, this study was unable to determine if there are cultural implications or affects. Future research could possibly delve into what aspects of family process rules, shame, prosocial and antisocial behaviors change or are influenced by differing races or ethnicities. Shame also needs to be explored more as a mediating variable, like in this study, and not just as a predictor of certain childhood outcomes.

## Limitations

There are several limitations that accompany this study. It was cross-sectional in design whichprevents determination of cause and effect. Additionally, the sampled population is much

more a representation of an upper middle class population with the levels of income and education for the parents and may not encompass all the elements that go into lower SES homes. Additionally, the findings cannot be generalized to the larger United States since the sample comes from the greater Seattle area. The demographics of the sample do not mirror those of the United States in the sense that Latino families are underrepresented in the sample.

## Conclusion

The aim and purpose of this study was to explore the possible interplay between family implicit rules and adolescent communications outcomes with shame as a possible mediator. Findings showed significant correlations between the types of implicit rules, facilitative or constraining, that are created in family systems and prosocial and antisocial behaviors. Shame proved to be a significant correlate as a mediating variable between family implicit rules and adolescent outcomes. It is important for clinicians and parents alike to be aware of the types of rules that are being structured within families and their possible negative or positive outcomes. As clinicians and families become more aware of family structural and functional implied rules, they will be able to improve overall family functioning as well as adolescent communication behaviors.

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## List of Figures

**Figure 1**. *Measurement and Structural Model with Facilitative and Constraining Family Implicit Rules as Exogenous Variables and Adolescent Pro-social and Antisocial Behavior with Mother and With Father as Endogenous Variables with Adolescent Internalized Shame as a Potential Mediating Variable.*

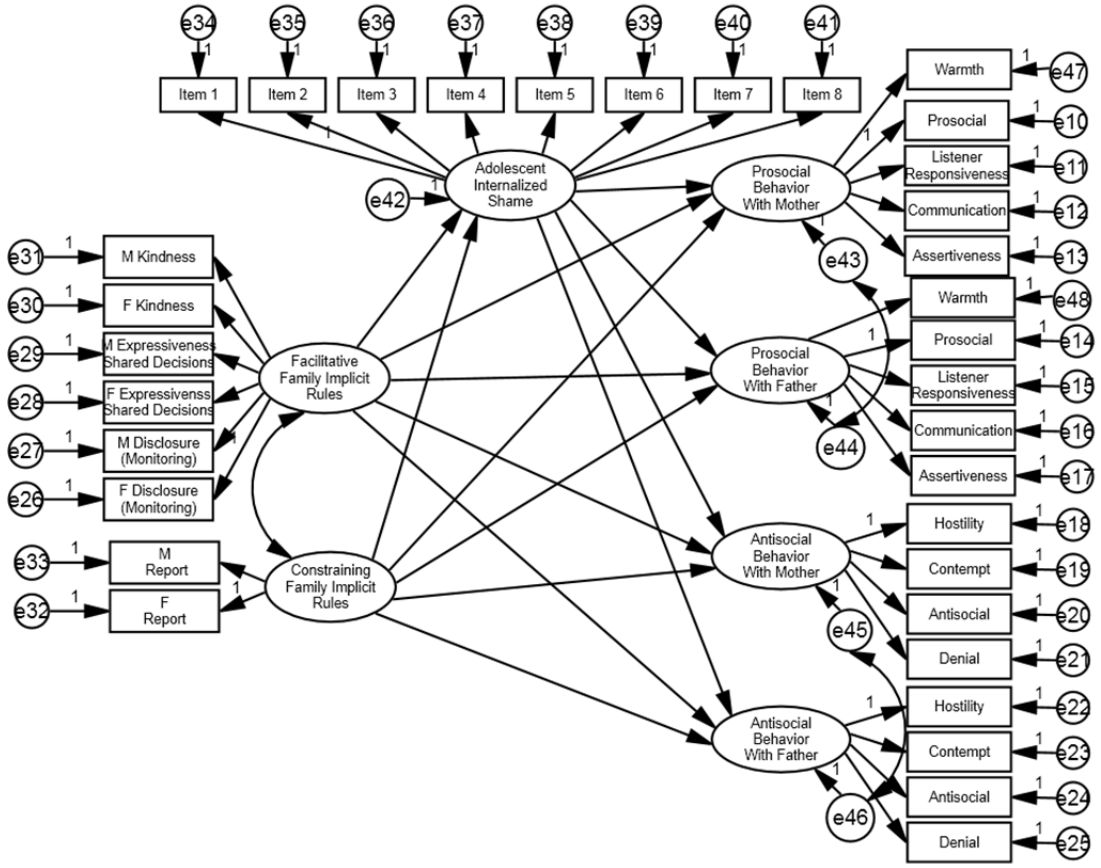
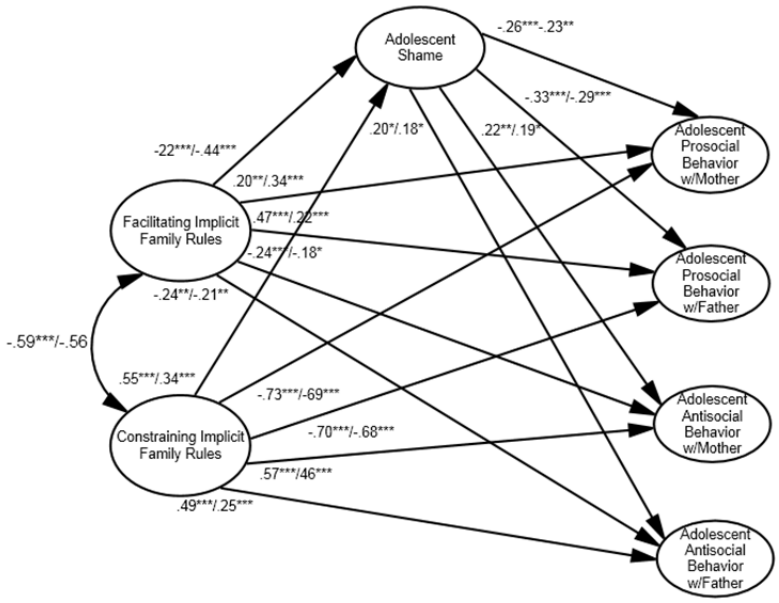


**Figure 2.** *SEM Results Comparing Paths for Girls and Boys.*




*$p$<.05, **$p$<.01, ***$p$<.001 NOTE: Coefficients for girls occur first with coefficients for boys after the diagnol on each path.

## List of Tables

**Table 1.** *Demographic Characteristics of Fathers, Mothers, and Children.*

*Information was taken from wave II which is the last time that age was asked of the participants.

| Variable | Mother $\bar{X}$ *(SD)* | Father $\bar{X}$ *(SD)* | Female child $\bar{X}$ *(SD)* | Male child $\bar{X}$ *(SD)* |
|---|---|---|---|---|
| Age | 44.3 (5.74)* | 46.2(5.93)* | 15.24(1.02) | 15.23(.99) |
| Family Size | N/A | N/A | 2.62(1.24) | 2.46(.99) |
| Income | 129253.79 (187460.51) | 129253.79 (187460.51) | 129253.79 (187460.51) | 129253.79 (187460.51) |
| Median | 100000.00 | 100000.00 | 100000.00 | 100000.00 |
| | Percentages | | | |
| Education | | | | |
| Less than high school | .9% | 0.3% | N/A | N/A |
| High School | 4.9% | 5.1% | N/A | N/A |
| Some college | 22.7% | 15.8% | N/A | N/A |
| Associates | 3.6% | 3.2% | N/A | N/A |
| Bachelors or higher | 67.9% | 75.5% | N/A | N/A |
| Family Race*** | | | | |
| All European American | | | 75.5% | |
| All African American | | | 4.2% | |
| All Hispanic | | | .3% | |
| All Asian American | | | 1.2% | |
| Other | | | .3% | |
| Multi-Ethnic | | | 18.5% | |

**Table 2**. *Means and Standard Deviations for all Measured Variables (N=322 Families).*

| Variables | Families with Boys $\bar{X}$ (S.D) | Families with Girls $\bar{X}$ (S.D.) |
|---|---|---|
| **Facilitating Family Implicit Rules** | | |
| Mother Report-Kindness | 3.97 (.52) | 4.05 (.50) |
| Mother Report-Expressiveness | 3.77 (.62) | 3.85 (.64) |
| Mother Report-Monitoring | 4.43 (.52) | 4.50 (.47) |
| Father Report-Kindness | 3.97 (.50) | 3.97 (.52) |
| Father Report-Expressiveness | 3.58 (.62) | 3.59 (.65) |
| Father Report-Monitoring | 4.29 (.51) | 4.32 (.57) |
| **Constraining Family Implicit Rules** | | |
| Mother Report | 2.16 (.40) | 2.13 (.40) |
| Father Report | 2.30 (.42) | 2.26 (.39) |
| **Adolescent Shame** | 1.78 (.83) | 2.05 (.96) |
| **Prosocial Behaviors with Mother** | | |
| Warmth | 1.08 (.42) | 1.15 (.67) |
| Prosocial | 3.06 (1.01) | 3.08 (1.30) |
| Listener Responsiveness | 3.28 (1.66) | 3.49 (1.83) |
| Communication | 4.11 (1.14) | 3.81 (1.24) |
| Assertiveness | 2.86 (1.75) | 3.00 (1.80) |
| **Prosocial Behaviors with Father** | | |
| Warmth | 1.02 (.18) | 1.11 (.52) |
| Prosocial | 2.76 (.95) | 2.87 (1.11) |
| Listener Responsiveness | 3.06 (1.60) | 3.29 (1.68) |
| Communication | 3.76 (1.15) | 3.63 (1.35) |
| Assertiveness | 2.42 (1.60) | 2.79 (1.67) |
| **Antisocial Behaviors with Mother** | | |
| Hostility | 1.70 (1.38) | 1.88 (1.55) |
| Contempt | 1.37 (.92) | 1.72 (1.37) |
| Antisocial | 2.33 (1.85) | 2.46 (1.95) |
| Denial | 1.40 (.93) | 1.68 (1.34) |
| **Antisocial Behaviors with Father** | | |
| Hostility | 1.48 (1.26) | 1.78 (1.34) |
| Contempt | 1.35 (1.03) | 1.53 (1.13) |
| Antisocial | 1.98 (1.69) | 2.23 (1.71) |
| Denial | 1.23 (.78) | 1.62 (1.37) |

**Table 3**. *Correlations for All Latent Variables in the Model. (N=322 families)*

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Facilitating Family Implicit Rules | 1.0 | | | | | | | | | | | |
| 2.Constraining Family Implicit Rules | -.58*** | 1.0 | | | | | | | | | | |
| 3.Adolescent Shame | -.32*** | .36*** | 1.0 | | | | | | | | | |
| 4.Prosocial Behavior w/Mother | .34*** | -.48*** | -.23** | 1.0 | | | | | | | | |
| 5.Prosocial Behavior w/Father | .44*** | -.36*** | -.21** | .67*** | 1.0 | | | | | | | |
| 6.Antisocial Behavior w/Mother | -.21** | .28*** | .20* | -.29*** | -.43*** | 1.0 | | | | | | |
| 7.Antisocial Behavior w/Father | -.19* | .26*** | .21** | -.24*** | -.38*** | .17* | 1.0 | | | | | |
| 8.Child Gender | .05 | -.08 | .13 | .01 | .01 | .10 | .09 | 1.0 | | | | |
| 9.# Siblings | .03 | .02 | .01 | -.02 | .03 | .03 | .04 | .01 | 1.0 | | | |
| 10.Father Education | .05 | -.03 | -.04 | .04 | .05 | -.02 | -.03 | .09 | .04 | 1.0 | | |
| 11.Mother Education | .04 | -.02 | -.02 | .07 | .06 | -.04 | -.02 | .05 | .02 | .55*** | 1.0 | |
| 12. Income | .02 | -.03 | -.07 | .01 | .03 | -.02 | -.03 | .08 | .06 | .69*** | .61*** | 1.0 |

**Table 4**. *Sobel Tests for Mediation*

| Indirect Path | W/ Mother | W/ Father |
|---|---|---|
| Girls: | | |
| Facilitative Rules—Shame—Adolescent Prosocial Behavior | 5.16*** | 5.97*** |
| Facilitative Rules—Shame—Adolescent Antisocial Behavior | -3.79*** | -3.32*** |
| Constraining Rules—Shame—Adolescent Prosocial Behavior | -5.96*** | -5.71*** |
| Constraining Rules—Shame—Adolescent Antisocial Behavior | 4.29*** | 3.31*** |
| Boys: | | |
| Facilitative Rules—Shame—Adolescent Prosocial Behavior | 4.68*** | 5.02*** |
| Facilitative Rules—Shame—Adolescent Antisocial Behavior | -.362*** | -3.29*** |
| Constraining Rules—Shame—Adolescent Prosocial Behavior | -4.89*** | -5.03*** |
| Constraining Rules—Shame—Adolescent Antisocial Behavior | 3.21*** | 3.37*** |

****p*<.001