

A PRELIMINARY INVESTIGATION OF THE  
USE OF LAST-RESORT TACTICS  
TO DISCIPLINE TODDLERS

By

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## CHAPTER I

### INTRODUCTION

Parenting is one of the most researched topics in the human development field as it is one of the most important responsibilities that many people experience in their lifetime. Children learn about the world from many different individuals and experiences, but the relationship between a parent and child can provide a central source of love, knowledge, and guidance. Parenting is a multi-faceted role, as parents may serve as a caretaker, teacher, mentor, provider, and friend. One of the central roles of a parent among many different functions is to be a disciplinary figure. This particular function has been heavily studied as certain forms of punishment used during discipline episodes have been controversial, but other aspects of discipline have been overlooked.

#### *Purpose and Justification*

This study is a preliminary investigation of last-resort discipline tactics that mothers use with toddlers from 18 to 30 months of age. As this is the first known study that asks about last-resort tactics directly, the primary purpose of this study is to provide some initial, preliminary information about last-resort discipline tactics used by mothers of young children. To accomplish this, this study seeks to discover the range of last-resort tactics that mothers of young children use, the frequency with which they are used, and the role of a mother's negative affect when using such tactics. This study also seeks to examine the associations of such last-resort characteristics with child outcomes such as



externalizing and internalizing problems, difficulty of daily problems, and effortful control. A brief introduction is presented in order to describe the research questions and hypotheses of this study. Definitions and previous research on each construct will be presented in addition to an explanation for the need for this study.

### *Definition of Child Outcomes*

This study is investigating the associations of several characteristics of last-resort tactics with immediate and longer term child outcomes. The most important immediate child outcome is prompt compliance or cooperation with parental commands. This is an important child outcome because compliance is considered a keystone competence that, if not achieved in early childhood, puts the child at risk for overt and covert behavior problems (e.g., antisocial behavior, stealing, substance abuse; Loeber et al., 1993).

The second category of child outcomes involves longer term or enduring child outcomes. The overall discipline used by parents must achieve normal levels of cooperation without creating other long-term problems, such as externalizing problems, internalizing problems, high difficulty of daily problems, and poor abilities in effortful control.

The term *effective* is used throughout this study when examining last-resort discipline tactics. This study defines effectiveness as the achievement of acceptable cooperation with parental requests, facilitation of competencies, and prevention of behavior problems, therefore addressing both immediate and long-term outcomes in children. One long-term child outcome, effortful control, has been found to be linked to children's willingness to comply. Effortful control is a temperamental construct that is defined as the ability to suppress a dominant response and carry out a subdominant

response (Kieras, Tobin, Graziano, & Rothbart, 2005). Kochanska, Murray, and Coy (1997) found effortful control to be associated with committed compliance in early school age children. Spinrad et al. (2007) found effortful control to be a mediator that influenced children's externalizing behavior problems. Therefore, an effective last-resort tactic would promote immediate child compliance, and also more enduring effortful control, which in turn would reduce behavior problems, such as externalizing problems.

### *Importance of this Study*

There is little doubt about the importance of investigating the role of discipline within the mother-child relationship, as discipline serves as an integral part of the interaction between a mother and her child. The debate concerning the types of discipline tactics used by parents has long been present, as much research has been conducted investigating the role of parental discipline in a child's development. There are several different disciplinary measures that parents use to correct their child's misbehavior, but much of the research has been conducted primarily focusing on the most controversial form of discipline, corporal punishment. This research on corporal punishment has revealed inconsistent findings over time, creating confusion as to what discipline measures are the most effective and beneficial over time for the parent and child.

Many scholars have argued that corporal punishment is invariably harmful for child well-being (Gershoff, 2002; Lytton, 1997; Mulvaney & Mebert, 2007; Straus, 2000), whereas other researchers have found that nonabusive spanking can reduce subsequent noncompliance and antisocial behavior under some conditions, such as when used to enforce cooperation with time-out in defiant 2- to 6-year-olds (Baumrind, Larzelere, & Cowan, 2002; Larzelere, 1996, 2000). Mixed findings have also become

evident when taking cultural differences into consideration, as Whaley (2000) found that the detrimental outcomes of corporal punishment found in European American families were not evident in African American families. Despite these differences, continuing a focus upon different forms of discipline used by parents is important in order to fill in the gaps within discipline research.

One of these gaps within the discipline research is information concerning last-resort discipline tactics. At a time when many experts are advising parents never to spank their children, it is essential to know what disciplinary tactics would be more effective in achieving child compliance as a last-resort tactic. Current research does not address that for at least three reasons. One is that few studies making direct comparisons have found the outcomes of alternative types of disciplinary enforcements to be more beneficial than outcomes of spanking as typically used (Larzelere & Kuhn, 2005). Second is the reliance on frequency measures, which would be associated with *less effective* use of a last-resort tactic. The more effectively any last-resort tactic is used, the less frequently it would be used, because children would then comply with the milder disciplinary tactics enforced by the last-resort tactic. Third, there is no research known to the author that asks parents directly about their last-resort tactics.

This study will attempt to accomplish its primary purpose of providing some initial, preliminary information about last-resort discipline tactics used by mothers of young children. In order to fulfill this purpose, this study will address the following research questions:

*Research Questions:*

- 1) What last-resort tactics do mothers of 18- to 30-month-old children report using?

- 2) Does the intensity/severity of the last-resort tactic (e.g., spanking vs. milder tactics) increase with the age of the child?
- 3) How is the mother's level of negative affect for using her last-resort tactic associated with the rated intensity/severity of the last-resort tactic (e.g., spanking vs. milder tactics)?
- 4) How is the mother's level of negative affect for using her last-resort tactic related to child outcomes (externalizing problems, internalizing problems, difficulty of daily problems, and effortful control)?
- 5) How is the frequency of last-resort tactics associated with child outcomes?
- 6) Do child outcomes differ by intensity/severity of type of last-resort tactic (e.g., by intensity/severity or physical discipline vs. non-physical tactics)?

This research will help address these questions and help obtain a greater understanding of this integral part of the parent-child relationship. In addition, this study has the potential to benefit society because there has been little research focused on last-resort discipline tactics. Better understanding of last-resort tactics is needed for two main reasons. First, this study can help us understand what tactics are more effective in achieving child compliance than spanking if it is banned or discouraged. Second, this study can help us know how last-resort tactics can best enforce milder disciplinary tactics without increasing the risk of further escalation. This is particularly important when many countries are banning the traditional last-resort tactic of physical discipline and even milder forms of physical force without evidence about alternative last-resort tactics that would be more effective in achieving child compliance and other desirable child outcomes.

## CHAPTER II

### REVIEW OF LITERATURE

#### *Theoretical Frameworks*

This literature review attempts to explore last-resort discipline tactics through two different theoretical lenses that help to provide insight into the effects of discipline on the four child outcomes of interest in this study (externalizing problems, internalizing problems, difficulty of daily problems, and effortful control), as well as investigate the implicit rationale behind parental disciplinary decisions. These theoretical frameworks include the social exchange framework and the conditional sequence model.

#### *Social Exchange Framework*

The social exchange framework helps explain the implicit rationales behind parental disciplinary decisions and child responses to discipline, as this particular framework's central focus is motivation. According to Homans (1961), social exchange is a theory to explain the exchange of tangible or intangible activity that is rewarding or costly between at least two people. This framework was created by building upon the key ideas of behaviorism and economic theories, where certain behaviors are viewed as a function of its profit (Sabatelli & Shehan, 1993). It proposes an answer to questions such as the following: Why do people behave the way they do? Why does an individual make certain decisions in life? These questions can be answered by the implicit rationales underlying the decisions made by humans. These decisions made by parents may be

thought out according to a plan, or they may be reactive in nature as a response to their child's behavior or outside influences. These rationales might be overt, but are more likely to be covert or subconscious.

One of the main limitations to this theoretical framework is the question of whether people rationally calculate the costs and rewards that will be associated with certain decisions and behaviors. There is no clear-cut answer to this particular issue, but according to Nye (1979), people behave according to the best information that is available to them when making decisions. Because it is not possible for people to know exactly what rewards and costs are actually going to result from certain behaviors, people base their decisions on their expectations of what would occur (Sabatelli & Shehan, 1993). As a result, during discipline episodes, parents and children calculate the rewards and costs associated with different behaviors according to what they know, either consciously or subconsciously.

Because the social exchange framework claims to explain interpersonal decision-making, it also applies to parents' and children's choices during discipline episodes. According to this framework, people seek to maximize rewards and minimize costs associated with certain behavioral choices through the idea of utilitarianism (White & Klein, 2002). When parents are involved in a discipline incident with their child, they weigh the rewards and costs associated with certain disciplinary options, while the child is weighing the rewards and costs associated with choosing to obey versus choosing to disobey their parent's commands. A reward can be defined as something that is perceived as beneficial or advantageous to a particular actor's interests (White & Klein, 2002). On the other hand, a cost is something that is perceived as detrimental or unfavorable to a

particular actor's interests. Rewards may include feelings of pleasure, satisfaction, or gratification. It may be rewarding to parents when their child chooses to behave appropriately, while it may be costly to experience feelings of conflict, embarrassment, anxiety, or harm to the parent-child relationship (Raschick & Ingersoll-Dayton, 2004). According to this framework, both parents and children are calculating the profit, the ratio of rewards to costs, in each situation, either consciously or subconsciously. If a disciplinary choice by the parent or the child's choice of action is deemed to be profitable, the parent or child is maximizing utility, which is the goal of every individual according to the social exchange framework.

A well-known behaviorist application of the social exchange framework to parental discipline is Patterson's coercive process theory (Patterson, Reid, & Dishion, 1992). Patterson argues that children learn antisocial behavior in the family because the behavior pays off in getting their parents to stop requiring the children to do things they do not want to do. At the same time, parents get rewarded for dropping their demands because their children stop their temper tantrum or antisocial behavior. As a result, these parents and children are training and conditioning each other, with the child learning that defiance, temper tantrums, and antisocial behavior are beneficial, and the parents learning to drop their demands when the child objects. This coercive process between parent and child may eventually become harmful. Snyder, Edwards, McGraw, and Kilgore (1994) compared families with aggressive and nonaggressive adolescent boys. They found that aggressive parent-child dyads were more prone to engage in conflict, engaged in more prolonged conflicts, and escalated more quickly to higher levels of aversiveness in comparison to non-aggressive dyads. These dyads were also less likely to reciprocate

attempts to de-escalate the conflict intensity. This is consistent with the coercive process theory in that aggressive boys and their parents have learned that acting more aversively pays off, whereas de-escalating makes one vulnerable to the other person's renewed escalation. In contrast, the parents of non-aggressive boys have learned to out-persist but not out-escalate their sons.

The social exchange framework influences the hypotheses in this study, as they attempt to further our understanding of one part of the discipline sequence. Parents need to discipline their children so that they learn that appropriate behaviors pay, or are rewarding, and inappropriate behaviors do not pay, or are costly. One primary goal of discipline is to make cooperation and reasonable compromising profitable, and to make aversive misbehavior, such as temper tantrums, costly. To achieve that goal, parents need to teach appropriate behavior, and prevent misbehavior with verbal tactics, such as reasoning. When those measures do not achieve child compliance, however, they need to use disciplinary enforcements in a way that shows that unacceptable noncompliance, especially defiance, does not pay and is costly to the child. Moreover, disciplinary enforcements should be used in a way that teaches the child that it will be more profitable for them if they choose to cooperate with verbal corrections in the future. If the child "wins" by not complying with a more intense tactic, such as time-out, then an effective back-up for time-out is needed, as shown by a series of studies with clinically defiant children and further described in the next section on the conditional sequence model (Roberts, 1982, 1988; Roberts & Powers, 1990).



### *Conditional Sequence Model*

Larzelere (2001) described a conditional sequence model of disciplinary responses that parents may use in order to combine “love and limits” during discipline episodes. This conditional sequence model is an elaboration of the part of Bell’s Control System Model that describes how parents’ disciplinary techniques are sequentially ordered from mild to more forceful types of disciplinary techniques (Bell & Harper, 1977). For example, disciplinary actions can be ordered from gentle verbal corrections to mild power assertion to more forceful power assertion. Although Bell and his colleagues found that disciplinary techniques are typically sequenced from mild to more forceful, they said little about how that sequencing might be related to its effectiveness. The conditional sequence model is both a description of common sequences of parent responses to misbehavior and a hypothesis about possibly optimal ways to sequence their discipline tactics. In this particular model, punishment is used in a way that enforces the teaching aspects of discipline. One assumption is that more forceful disciplinary tactics should enhance the effectiveness of milder tactics. Another assumption is that parents can best use the conditional sequence to find the least forceful tactic that will be effective in each disciplinary episode.

A possibly optimal sequence begins with gentle, verbal correction, such as a reprimand, followed by brief reasoning if the child does not comply with the parent’s demands (see Figure 1). If reasoning did not achieve child compliance, then the parent would give the child one warning for a non-physical consequence, such as time-out in a chair. If the time-out warning still did not achieve child compliance, then the parent would back up their warning with the specified non-physical consequence, such as a chair

time-out. If the child refused to cooperate with time-out, then the parent would provide a warning for a time-out back-up. If this warning still did not attain child compliance then the time-out would be backed up with a last-resort enforcer tactic such as spanking or brief room isolation (Larzelere, 2001). Although the sequence is supported by the few studies that address the sequencing of disciplinary tactics, it is proposed as a starting point from which to identify variations and their effects on child outcomes.

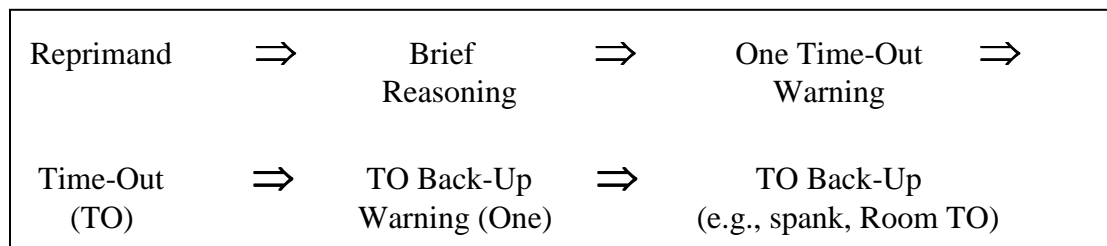


Figure 1. Example of a conditional sequence model of parental disciplinary responses (R. E. Larzelere, personal communication, October 9, 2008)

Larzelere (2001) argues that this conditional sequence model can reconcile contradictory recommendations about optimal disciplinary tactics by behavioral parent trainers versus child psychologists. Child psychologists' preference for reasoning over any type of power assertion cannot explain why contingent punishments such as time-out and back-ups for time-out are validated components of one of the best documented clinical treatments for helping parents manage the behavior of young children with disruptive behavioral disorders (e.g., oppositional defiant disorder, conduct disorder). On the other hand, behavioral parent trainers cannot explain why the most well-behaved children have parents that rarely use contingent punishments, such as time-out, but rely

almost entirely on mild verbal corrections, including reasoning. The conditional sequence model reconciles these contradictory recommendations by demonstrating why consistent use of single warnings, time-out, and back-ups for time-out are necessary for clinically defiant children, while showing that the goal is to obtain age-appropriate cooperation from the child with primarily verbal correction, including reasoning.

The conditional sequence model may also represent a mechanism underlying the differential child effects of Baumrind's (1966) parenting styles. Optimal authoritative parents use all levels of this model preferring reasoning and communication, but enforcing limits, when necessary, with the mildest punishment that will be effective in achieving child compliance. Authoritarian parents are more likely to bypass the reasoning step and proceed more quickly to punishment, including aversive punishment. On the other hand, permissive parents are more likely to avoid all types of punishment. Their systematic use of a conditional sequence of disciplinary tactics may account for the positive outcomes consistently demonstrated for authoritative parenting (Baumrind, 1991; Parke & Buriel, 2006; Steinberg, 2001). Along with greater use of give-and-take reasoning, Baumrind's authoritative parents were closest to the mean frequency in their use of spanking, using it a little more than permissive parents, but a little less than authoritarian parents (Baumrind, 1966; Baumrind, Larzelere, & Owens, 2008).

Although there are only a few studies on how the sequencing of disciplinary tactics contributes to effective parenting in reducing defiance, noncompliance in general, and aggression, the available studies support the effectiveness of the conditional sequence model. The support is first that milder disciplinary tactics in the sequence become more effective by themselves to the extent they are consistently backed up by stronger steps in

the sequence. Larzelere, Sather, Schneider, Larson and Pike (1998) found that reasoning's effectiveness with 2- and 3- year-olds by itself was greater when it was combined with punishment at least 10% of the time, especially non-physical punishment. The children who increased their disruptive behaviors the most occurred during the next 20 months were those whose mothers employed reasoning frequently but rarely backed it up with punishment. In contrast, the largest decrease in disruptive behaviors took place when parents employed reasoning frequently but backed it up with punishment when needed, preferably non-physical punishment. Second, a series of studies by Roberts showed that effective last-resort tactics are necessary for clinically referred 2- to 6-year-old children who are unlikely to cooperate with time-out otherwise. In the final study in the series, Roberts and Powers (1990) found that spanking and a forced room isolation were the most effective enforcements for cooperation with time-out, resulting in almost no time-out resistance within three weeks in the home, replicating previous findings (Roberts, 1982, 1988). These studies demonstrate that more forceful tactics can successfully back up milder tactics such as time-out. Once the child cooperates with the milder tactics (e.g., time-out), then the more forceful back-up tactic is rarely if ever needed. In that sense, the conditional sequence model is the best-supported model for how disciplinary tactics can be sequenced conditionally in a way that increases the effectiveness of the milder tactics and reduces noncompliance in young children. It is also one of the few theories that suggest how last-resort tactics might be used to enhance the effectiveness of milder disciplinary tactics.

### *Last-Resort Discipline Tactics*

The conditional sequence model is also one of the few theories with implications about last-resort tactics. First, it implies that every parent has one or more last-resort tactics, defined as the discipline tactic parents use when no other methods are working in a particular discipline episode. It also implies that the most effective last-resort tactic will be one that increases the child's cooperation with milder disciplinary tactics. When that is accomplished, the last-resort tactic will be used infrequently, if at all. Thus the most effective last-resort tactic will be one that is rarely used, but is effective in enforcing cooperation with milder disciplinary tactics when it is used.

Little is known about what last-resort tactics parents use in disciplining their children at any age. Ritchie (1999) investigated how disciplinary tactics change within an extended disciplinary episode according to its length and the type of child noncompliance. Three disciplinary tactics of spanking, time-out, and physical power assertion, met two criteria for last-resort tactics with 3-year-olds: First, they were more likely to be used later in a discipline episode than at its beginning. Second, they were more likely to be used for defiance than for milder types of noncompliance. Consequently, those three tactics are the most likely candidates for last-resort tactics. Given this, it could be expected that certain last-resort tactics may be most commonly used by mothers of young children. Therefore, I hypothesize that the majority of mothers in this study will report using physical punishment, time-out, isolation (a forceful type of time-out), or physical power assertion as their last-resort tactic.

### *Corporal Punishment/Spanking*

Corporal punishment is defined as disciplinary punishment by applying physical pain to the body. Spanking can be defined as a swat with an opened hand to the buttocks or extremities to correct a child's misbehavior (Friedman & Schonberg, 1996; Ritchie, 1999). Straus and Stewart (1999) found that 94% of parents in the United States have spanked their child before the age of three or four years of age. Spanking may be the most common last-resort tactic, but no data could be found on last-resort tactics specifically. Because it is being discouraged by expert advice and banned in over 20 countries (Center for Effective Discipline, 2008), information is needed about other last-resort tactics that would be more effective.

Gershoff (2002) found physical punishment to be positively related to immediate compliance, but found that during childhood, physical punishment was detrimentally related to moral internalization, aggression, delinquent and antisocial behavior, quality of parent-child relationship, mental health, and being a victim of physical abuse. She also found that physical punishment was detrimentally related to aggression, criminal and antisocial behavior, mental health, and adult abuse of own child or spouse during adulthood, demonstrating the argument that corporal punishment may serve as a negative influence on children.

Although several studies have found spanking to be related to negative outcomes on children, Larzelere and Kuhn (2005) conducted a meta-analysis of studies comparing child outcomes of physical punishment versus alternative disciplinary tactics. The results depended on the type of physical punishment. When corporal punishment was used too severely or as the predominant disciplinary method, its outcomes were more adverse than

alternative disciplinary tactics. In contrast, the outcomes of customary spanking were neither better nor worse than for any alternative tactic, except for one study that found spanking to be associated with less substance abuse than were alternative tactics. At the other extreme, conditional spanking was defined in their meta-analysis as a nonabusive last-resort tactic when 2- to 6-year olds respond defiantly to milder tactics, such as reasoning or time-out. Their meta-analysis actually found that conditional spanking was more effective than 10 of 13 alternative discipline tactics for either minimizing child noncompliance or antisocial behavior. It showed equivalent outcomes to the other three alternatives.

A second meta-analysis also found spanking to have small negative effects at worst. Paolucci and Violato (2004) conducted a meta-analysis examining the affective, cognitive, and behavioral effects of corporal punishment, and found that exposure to corporal punishment does not significantly increase the risk to children of developing behavioral, cognitive, and affective problems. Therefore, these findings provide additional evidence that spanking may have only minimal negative effects of a child's functioning and development.

#### *Time-Out*

Ritchie (1999) defined time-out as placing a child in a corner of a room, or a separate room. The effectiveness of time-out is heavily influenced by one of time-out's most critical elements, the change from the child being part of a reinforcing environment to a less reinforcing environment (Brantner & Doherty, 1983). Although time-out is recommended by professionals to be used for events when the child is out of control to an

extreme or poses a threat to the safety of other children, it is more often used by parents in response to simple acts of noncompliance (Readdick & Chapman, 2000).

Time-out has been determined to be the most successful discipline tactic in the reduction of verbal and physical aggressive behavior by children when administered consistently and immediately following misbehavior (Turner & Watson, 1999; Zabel, 1986). Unfortunately, many parents are not knowledgeable of the parameters and proper procedures of time-out. As a result, this particular discipline tactic is less effective in correcting a child's misbehavior, or preventing such occurrences in the future when used improperly (Banks, 2002; Turner & Watson, 1999).

To address this issue to determine how parents can become more knowledgeable of this discipline tactic, one study examined how to properly teach parents how to successfully implement time-out in response to their child's misbehavior. O'Dell, Krug, Patterson, and Faustman (1980) divided parents into four groups: receiving a take-home manual, a film in addition to a written take-home manual, time-out modeling and a take-home manual, or no instruction. All of the methods using the take-home manual were better than the no instruction control group on both outcome variables. They found though that no significant differences were found between the three treatment groups, which demonstrated the importance of informing parents on how to properly use a time-out procedure.

Some parents use the time-out procedure correctly. Many of these parents view time-out as an effective form of discipline as it may provide a child the opportunity to think about bad behavior, restore feelings of shame, and think of socially desirable responses in similar circumstances (Readdick & Chapman, 2000). Erford (1999) and



Olmi, Sevier, and Nastasi (1997) found time-out to serve as a successful disciplinary technique to reduce noncompliance in children with developmental delays and behavior disorders, adolescents with psychiatric disorders, and preschoolers characterized by high levels of defiance. In addition, Fabiano et al. (2004) found time-out to be a successful technique resulting in a reduction of maladaptive behavior in children with ADHD.

### *Physical Power Assertion*

Physical power assertion is defined as physically taking hold of the child or physically making the child comply. This also includes restraining the child or taking away the object causing the noncompliance (Ritchie, 1999). There is relatively little research on physical power assertion, although it was used more commonly than either spanking, time-out, or privilege removal in Ritchie's (1999) research with 3-year-olds. Similarly, mothers reported using forced compliance in 20% of the disciplinary episodes in Larzelere et al. (1998). However, when forced compliance was combined with disciplinary reasoning, it enhanced the subsequent effectiveness of reasoning by itself in only 1 of 10 analyses, compared to 9 of 10 analyses for non-physical punishment and 4 of 10 analyses for physical punishment. Thus the only study that investigated physical power assertion as a back-up tactic did not find it to be very effective in enforcing that milder disciplinary tactic. Similar to time-out and spanking, physical power assertion was more likely to be used when 3-year-olds were defiant and it decreased the immediate probability of defiance, compared to the immediately preceding probability (Larzelere, Ritchie, & Kuhn, 2005).

Related research has investigated physical guidance with developmentally disabled children and restraint in institutions (Kern, Delaney, Hilt, Bailin, & Elliot,

2002). But there is very little research on physical power assertion with normal developing children in families. In addition, several studies have investigated seclusion, and physical holding/restraint, but these studies investigated children or adolescents in substitute care or institutions with extreme levels of violent behavior (Delaney, 2006; Kennedy & Mohr, 2001; Mohr, Petti, & Mohr, 2003; Ziegler, 2001). More research is needed on physical power assertion, since one form of it became a type of last-resort tactic in Sweden nine years after spanking was banned there (Haeuser, 1988), yet physical power assertion was banned along with all other use of physical force to discipline children in New Zealand in 2007 (Broad, 2007).

#### *Last-Resort Tactic Frequency*

It is clear from Gershoff's (2002) meta-analysis that the frequency of spanking, one possible last-resort tactic, is associated with multiple adverse outcomes in children, with the exception of immediate compliance. The issue that is debatable, however, is whether that association represents a detrimental causal effect of spanking, or whether it is due to child effects. In addition, the frequency of any last-resort tactic is largely due to parental skill in preventing misbehavior and in responding effectively to misbehavior with milder disciplinary tactics. Those effects of behavioral challenges from children and of parental competence in preventing and responding more mildly to misbehavior must be accounted for in order to isolate the causal effects of alternative last-resort tactics.

#### *Child Effects*

Children make important contributions to their interactions with other people, which was often overlooked, as parents were thought to be primarily or solely responsible for how parental discipline is associated with child outcomes. Most parents can agree that

a construct such as temperament exists as soon as they have their second child. Discipline tactics that were successful in achieving child compliance with one child may no longer be as effective with their second child due to temperamental differences. Allport (1961) defined temperament as “the characteristic phenomena of an individual’s emotional nature, including his susceptibility to emotional stimulation, his customary strength and speed of response, the quality of his prevailing mood, these phenomena being regarded as dependent upon constitutional makeup and, therefore, largely hereditary in origin” (p. 34). As a result, when taking temperament into account, some children may need to be disciplined more often than other children with different temperaments.

When examining the effects of particular last-resort discipline tactics, it is important to consider the role of a selection bias occurring as a parent disciplines their child. A selection bias can cause invalid assumptions to be made about particular discipline techniques. Children with different temperaments cause parents to use more frequent and stronger disciplinary enforcements, including last-resort tactics. The frequency of those last-resort tactics will therefore be correlated with behavior problems due to the child’s temperament, both cross-sectionally and longitudinally. Any corrective action tends to be correlated with apparently detrimental outcomes, whether that corrective action is done by parents or professionals (Larzelere, Kuhn, & Johnson, 2004). For that reason, the types of analyses that show the strongest causal evidence against customary spanking also tend to show equally detrimental effects of non-physical disciplinary enforcements, psychotherapy, and *Ritalin* (Larzelere & Smith, 2000; Larzelere, Cox, Danelia, & Mandara, 2008; Larzelere, Ferrer, & Kuhn 2008).

A selection bias due to child effects can thus explain why the frequency of last-resort discipline tactics being used is associated with detrimental child outcomes such as antisocial behavior. Child effects (e.g., temperamental difficulty) may cause parents to use all disciplinary tactics more frequently. Further, children with difficult temperaments will be less likely to cooperate with mild disciplinary tactics. Because of that, child effects will increase the frequency of last-resort tactics even more than its general effect on frequency of all disciplinary tactics. If this association is due to child effects, then the frequency of any last-resort tactic will be associated with detrimental child outcomes. As a result, the second hypothesis of this study is that the frequency of all last-resort tactics will be positively associated with problem outcomes (externalizing problems, internalizing problems, difficulty level of daily problems) and negatively associated with the competency outcome (effortful control), and this association will be similar for physical and non-physical last-resort tactics. This study expects no differences in the associations of physical versus non-physical last-resort tactics with outcomes because child effects are thought to influence frequency more than type. On the other hand, if the detrimental outcomes associated with physical punishment are unique to physical punishment, then the frequency of physical punishment should be more strongly associated with detrimental outcomes than would be the frequency of non-physical last-resort tactics. Because last-resort tactics have not been studied before, these hypotheses are exploratory.

An additional child effect beyond temperamental difference that influences the type of discipline and frequency of discipline received is the age of the child. Socolar and Stein (1996) interviewed 204 mothers of 1 to 4-year-olds and found that maternal beliefs

in the use of spanking, teaching, and a negative disciplinary approach increased with child age, but maternal beliefs in the use of removing the child from a problematic situation was negatively associated with child age. Specifically, they found mothers became more supportive of time-out as their child grew older, especially between one and two years old. In addition, one study investigating the behaviors and attitudes of adolescent mothers of children between the ages of 12 and 18 months found that physical discipline was used by a similar percentage of mothers when their child was 12 and 18 months old (Verzemnieks, 1999). One difference was found in relation to the child's age, as there was a change in the form of physical punishment being used. Mothers using physical punishment primarily slapped the child's hand at 12 months of age but an increased number of mothers using physical punishment reported spanking their child at 18 months of age. Wauchope and Straus (1990) found that 64% of American children received physical punishment before 18 months of age and 87% before 24 months of age. These trends may be based on mothers' changing expectations of their child's behavior as they get older and mature.

Besides changes in expectations of toddlers affecting discipline tactics used, older toddlers may receive more severe discipline tactics due to an increase in misbehavior over time. Tremblay et al. (1999) found that the percent of children who have been physically aggressive increased significantly from 12 to 17 months, by when physical aggression had been reported for 80% of the children. Once this onset has occurred, many children increase in aggressive behaviors over time. Cummings, Iannotti, and Zahn-Waxler (1989) found that relative aggressiveness was stable in young children after the child reached their second birthday until they were five years of age, but Nagin and

Tremblay (1999) found that the average number of physical aggression behaviors was highest in kindergarten. An age-related increase in physical aggression and oppositional behavior among preschool children was also found among preschoolers by Larzelere, Amberson, and Martin (1992). They found that those behavior problems increased until 30 to 36 months of age, using the Toddler Behavior Checklist. A later national survey found that the prevalence of American spanking peaked at 94% at ages 3 and 4 (Straus & Stewart, 1999). Because of the increase in behavior problems, changes in maternal beliefs, and changes in prevalence of physical punishment, I hypothesize that the rated intensity of the last-resort tactic will increase with age, and physical discipline will be more common as the last-resort tactic for older toddlers in comparison to younger toddlers.

#### *Parent Effects on Last-Resort Frequency*

The frequency of last-resort tactics can also be due to how skillfully parents have used milder disciplinary methods to prevent misbehavior and to respond to it when it occurs. When preventive and milder disciplinary responses are effective, parents do not need to resort to their last-resort tactic. To that extent, the frequency of any last-resort tactic is a symptom of lack of skill in other aspects of their disciplinary methods as well as the behavioral challenge presented by the child. Previously, a case was made that skillful use of last-resort tactics will result in milder disciplinary tactics being more effective, which in turn will decrease the parent's need to use their last-resort tactic. This also supports the hypothesis above, that the frequency of last-resort tactics will be correlated with adverse outcomes, regardless of the type of last-resort tactic.

### *Parent Effects on Child Outcomes*

Parent effects on child outcomes may also contribute to the associations of last-resort tactics with child outcomes. Some parent effects may be due to the type of last-resort tactic that is used. Others may be due to *how* a last-resort tactic is used. Physical punishment is a last-resort tactic that is considered to have detrimental effects by many experts (Gershoff, 2002; Straus, 2001). However, Larzelere and Kuhn's (2005) meta-analysis found equivalent or better child outcomes for spanking than for alternative disciplinary tactics, except when corporal punishment was used too severely or as the main disciplinary tactic. Presumably any last-resort tactic would be counterproductive if used too severely. Moreover, if a tactic is used as the main disciplinary tactic, then it is being used as a first-resort tactic, not as a last-resort tactic. If those inappropriate ways of using last-resort tactics can be avoided, then there is little research that has found better child outcomes for any alternative last-resort tactic than for spanking, in direct comparisons with spanking for children under the age of 13. The only known exception is that Larzelere et al. (1998) found stronger evidence for non-physical punishment than for physical punishment as an effective back-up for disciplinary reasoning.

In addition to overly severe or premature use of last-resort tactics (as first-resort tactics), other important aspects of how last-resort tactics are used are parental consistency and negative affect. First, consistency of parental discipline may play a role in a child's development. Parental inconsistency has been shown to predict adverse child outcomes, such as antisocial behavior (Gardner, 1989). In addition, Acker and O'Leary (1996) investigated parental inconsistency by conducting a study of mother-child dyads that were placed in five different experimental conditions with regard to the responses of

the mothers to the children's demands. These different conditions varied from reprimanding, to combinations of reprimand and ignoring, and reprimand and attending positively to the children's demands. This study found that the most adverse condition involved the mothers that were directed to reprimand half of their child's demands, and positively attend to the other half of the demands. The children in this group had the highest levels of negative affect when compared to the other four conditions and demanded their mother's attention more than the group that was reprimanded for 100% of their demands, reflecting the negative influence of inconsistent discipline.

Second, a mother's level of negative affect when she employs her last-resort tactic may influence the child as well. A mother may possess some level of negative affect when using their last-resort tactic as past studies have shown that parents have tended to have negative affect when they have to use spanking (Graziano, Hamblen, & Plante, 1996; Holden, Thompson, Zambarano, & Marshall, 1997). Specifically, Graziano et al. (1996) found that 85% of the parents in their study had moderate to high levels of anger, remorse, and agitation when using corporal punishment. This study acknowledges that some kinds of negative feelings about using last-resort tactics might have different implications than others. For example, anger, stress, and frustration might be associated with risk for escalation more than guilt, which might predict inconsistency. However, in this initial study, maternal negative affect is considered to be one broad concept that includes all forms of negative affectivity, without distinguishing among the different types. As a result, the fourth hypothesis of this study is that there will be a positive correlation between the rated intensity of the last-resort tactic used and the level of negative maternal affect when using their last-resort tactic. In addition, mothers who use



a physical last-resort tactic will report higher levels of negative affect when using their last-resort tactic in comparison to mothers who use a non-physical last-resort tactic.

Maternal negative affect may also increase the risk for abuse. When mothers become frustrated or their level of negative affect increases, the possibility of escalation to abuse may increase, as well as the risk of detrimental child outcomes. This may occur due to the mother feeling less confident as a disciplinary figure and because no other discipline tactics have resulted in child compliance. Because of this risk of abuse and other detrimental outcomes, the fifth hypothesis of this study is that there will be a positive association between maternal negative affect about using last-resort tactics and detrimental child outcomes, and a negative association between maternal negative affect about using last-resort tactics and child competency outcomes. Again, because last-resort tactics have not been examined previously, this aspect of the investigation is exploratory.

These parent variables may represent a possible causal reason for the associations between spanking and adverse outcomes. To get unbiased estimates of potential causal effects, however, research must control adequately for child effects and artifactual parent effects (e.g., findings that may really be due to competency in using milder disciplinary tactics). Unfortunately, this study is cross-sectional and is thus limited in being able to distinguish causal effects of the last-resort tactic from child effects and artifactual parent effects.

### *Benefits and Risks of the Use of Last-Resort Tactics*

#### *Potential Benefits*

Last-resort discipline tactics can be beneficial for families with young children, as they provide an effective tool for decreasing child noncompliance when used

appropriately. This process is best described by the conditional sequence model as it illustrates six different steps of gradually increasing forcefulness that assists the child in learning how to properly comply with their parents' requests. Consistent use of most of the steps in the conditional sequence model is an essential part of behavioral parent training, which has been shown to be effective in helping parents regain normal compliance (e.g., promptly obeying parental commands most of the time) from young clinically defiant children (Brestan & Eyberg, 1998; Eyberg, Nelson, & Boggs, in press). In one study, use of this type of sequence of steps improved levels of prompt obedience to parental commands from 24% to 74% (Roberts, 1997).

Time-out is the key step in responding to misbehavior, in these training procedures, but it must be backed up to be effective with behaviorally difficult children. A series of studies found that the traditional two-swat spank and brief forced room isolation were the two most effective back-ups for time-out with clinically defiant two- and six-year-olds (Roberts, 1982, 1988; Roberts & Powers, 1990). These children quickly learned to comply with time-out, which resulted in rare use of the back-up tactic later. This particular method is used in Parent-Child Interaction Therapy (PCIT; Hembree-Kigin & McNeil, 1995). Unfortunately, brief room isolation is not always a possible tactic as some homes and clinics may not always have a safe time-out room. In these situations, therapists often train parents to use restraint as a back-up, which was found to be less effective than both the two-swat spank and brief forced room isolation tactics (Roberts & Powers, 1990). Moreover, all three back-up procedures are a crime according to New Zealand's ban of all physical force to discipline children (Broad, 2007). When traditional last-resort tactics are banned, parents may be less able to enforce milder

tactics, which may undermine their overall disciplinary effectiveness, unless they learn how to use alternative effective back-ups for milder disciplinary tactics.

### *Potential Risks*

One of the most prominent risks of certain types of last-resort discipline tactics is the possibility of the tactic escalating to abuse. This can occur for a variety of reasons, but Kadushin and Martin (1981) found that the majority of the cases where parents had abused their child were escalations of a discipline encounter. Parents who are inconsistent with their discipline practices may escalate to abuse more easily than parents with consistent discipline practices, due to the child not responding well to the inconsistencies by continuing defiant behaviors (Acker & O’Leary, 1996; Gardner, 1989).

This escalation to abuse may also occur when parents become frustrated if their last-resort tactic does not work. They may escalate to abuse without intending to do so. As previously discussed, negative affect that mothers may be experiencing when they use their last-resort tactics may play a role in this possibility of escalation to abuse as feelings of frustration or anger may help create an unsafe discipline environment for the child.

After taking the risks and benefits of last-resort discipline tactics into account along with the role of child effects and the selection bias, an additional research question can be addressed concerning the association between the type of last-resort tactic used and child outcomes. As a result, the sixth hypothesis of this study is that the intensity of last-resort tactics will be positively associated with more adverse child outcomes. In addition, child outcomes will be more adverse in families using physical discipline compared to those using milder techniques as a last-resort tactic. These predicted associations could reflect child effects or parent effects.

### *International Movement to Ban Spanking*

Spanking has been a controversial discipline tactic for years and has been the subject of a heated debate. Some countries have considered banning the use of spanking in order to decrease rates of child abuse and to encourage supportive approaches for parents in its place (Larzelere, 2004). The first country to ban spanking was Sweden, which passed legislation in 1979 to ban moderately severe to severe spanking. Later the ban was understood to include mild spanking as well (Haeuser, 1988). The aim of this legislation was to reduce child abuse, but the available data suggest the opposite effect. Physical child abuse and criminal assaults by minors against minors increased approximately six-fold during the 15 years following the legislation (Larzelere, 2004; Larzelere & Johnson, 1999). In addition, Larzelere (2004) found that the six-fold increase in minors' assaults against minors was a much higher percentage increase than for older perpetrators during this same 15-year period. Older perpetrators were raised before the ban on spanking.

According to Larzelere (2001), particularly disruptive children may be in greater need of contingent punishment in comparison to easily managed children. As a result, successful use of the conditional sequence model, including the occasional use of an effective last-resort tactic will eventually result in children becoming more well-behaved and their parents using reasoning effectively and rarely resorting to punishment. Anti-spanking legislation may have the opposite effect of what is intended, as such laws may make milder discipline tactics less effective unless the replacements for spanking are equally effective back-up tactics (Larzelere, 2001). Better understanding of last-resort tactics is needed whether spanking is banned or not. If parents are not permitted to use

spanking, then they need to know what last-resort tactics would be as effective or more effective. If spanking is permitted, then parents need to know how it can best be used to support milder disciplinary tactics and the conditions under which it or alternatives would be the most effective as last-resort tactics.

## CHAPTER III

### METHODOLOGY

#### *Participants*

Thirty-one mothers and their children between the age of 18 and 30 months old served as participants in this study. The majority of the mothers and children were recruited from central Oklahoma, within about 80 miles of Stillwater, Oklahoma. Participants were selected through a convenience sampling technique from July through October 2008. Volunteer mothers with children in the desired age range were recruited using a variety of methods through collaboration with several organizations. Mothers were contacted through child care centers, community centers, local businesses, and advertisements in a newspaper and campus advertising page. The purpose of this study, its relevance, and the expectations of the subjects were explained verbally to each participant prior to obtaining written consent. To increase participation, participants received monetary compensation for their time and effort.

#### *Mothers*

A demographic questionnaire was used to obtain information concerning several characteristics of the sample population (see Appendix A). The mean age of the mothers was 28.8 years old ( $SD = 4.22$ ). The ethnicity distribution for the mothers was 83.9% White, 9.7% Hispanic, 3.2% African-American, and 3.2% Native American. Most were married (77.4%), with 3.2% separated, 6.5% cohabitating, and 12.9% single mothers. The

mother's highest level of education varied across the sample ranging from a high school diploma/GED (3.2%) to a doctoral or professional degree (3.2%), with 64.6% of the mothers having completed a bachelor's degree or higher. Monthly total household income ranged from over \$3,000 (43.3%), \$2,500 to \$3,000 (6.7%), \$2,000 to \$2,500 (13.3%), \$1,500 to \$2,000 (13.3%), \$1,000 to \$1,500 (10%), and \$500 to \$1,000 (13.3%).

### *Children*

The children's ages ranged from 18 to 28 months ( $M = 22.8$ ,  $SD = 3.22$ ). The child's gender was distributed almost evenly as 51.6% of the children were boys and 48.4% were girls. Finally, the majority of the children in this study had siblings, as 71% of the children lived with at least one more child at least half of the time.

### *Procedure*

After the mothers contacted the research team about the study by phone, eligible mothers were invited to set up a time for an interview at her home or the Oklahoma State University Observation and Coding Lab. Prior to the interview, the mothers completed the Demographic Questionnaire and the Child Behavior Checklist for Ages 1 ½ -5. At the interview appointment, a researcher conducted the Structured Open-Ended Interview, the Discipline Practices Questionnaire, the Problems for the Day questionnaire, and the Early Childhood Behavior Questionnaire. Approximately 24 to 72 hours following the interview appointment, the participants then received a follow-up phone call asking the mothers questions to complete the Problems for the Day questionnaire a second time.

## *Measures*

The mothers participating in this study completed the following five measures with trained research assistants from Oklahoma State University. These measures were part of a larger study, the Moms and Tots Study, attempting to understand decision-making processes by mothers of young children during selected discipline incidents.

### *Structured Open-Ended Interview*

A mother's last-resort tactic and the mother's level of negative affect about using her last-resort tactic were identified in the Structured Open-Ended Interview (see Appendix B). This measure contains two items of interest that are central to this study: "What last-resort action do you use when nothing else seems to work?" and "How do you feel when your child's misbehavior gets to this point?"

The thesis supervisor and I coded the mothers' answers identifying their last-resort tactic. The process led to three principles: (1) If two or more last-resort tactics are mentioned, select the one that is used when the other one does not work. (2) If one tactic is mentioned only for special situations (e.g., spanking for dangerous behavior), then it will not supersede another tactic mentioned as the last-resort tactic otherwise. (3) If one tactic is mentioned as the last-resort tactic, but has never been used before, it would still serve as the last-resort tactic. The best use of a last-resort tactic is to manage misbehavior without needing to use one's last-resort tactic. The two coders agreed on 28 of the 31 answers (90% inter-rater agreement), and resolved the disagreements by coming to a consensus on the remaining three cases.

The intensity of possible last-resort tactics was based on rank ordering by six members of the Moms and Tots Study staff. Nine disciplinary actions were ranked,



including all of the disciplinary actions on the last page of the Discipline Practices Questionnaire (see Appendix D), except for “Showed Appropriate Behavior,” “Involved Another Person in the Situation,” and “Other Disciplinary Action Listed.” The inter-rater reliabilities ranged from  $r = .82$  to  $.97$  (median  $r = .93$ ), except for the least reliable rater. After dropping the least reliable rater, the mean rankings were used as the rankings on a nine-point scale. Following group discussion, a distinction between time-out and isolation was made. Isolation involved force, either in escorting the child to the time-out location or use of a barrier to keep the child in time-out. This yielded the following order from least intensive (1) to most intensive (10): (1) held to soothe; (2) distracted or redirected; (3) ignored; (4) time-out; (5) remove privilege; (6) isolation; (7) forced compliance; (8) restrained; (9) slapped hand; (10) spanked. These intensity numbers were used to test the hypotheses concerning how the intensity of the last-resort tactic is associated with other variables, and may later be referred to as last-resort intensity. When comparing different types of last-resort tactics, the intensity ratings 1-8 represented non-physical punishment; and 9 and 10 represented physical punishment.

The mother’s responses to how they feel when they use their last-resort tactic was coded according to a seven-point scale, where (1) is least negative and (7) is most negative. Anchors for this scale were developed by six members of the Moms & Tots Study staff (e.g., 1 = “a necessity”; 4 = “frustrated”; 7 = “horrible”; see Appendix C). The thesis supervisor and I provided independent ratings for each mother’s level of negative affect for using her last-resort tactic. There was high agreement,  $r = .89$ . My codes were used unless a discrepancy exceeded one point, in which case a third coder provided a rating to reach a consensus. These negative affect ratings were used to test the hypotheses

concerning how the level of maternal negative affect for using her last-resort tactic is associated with other variables, and may later be referred to as negative affect.

#### *Discipline Practices Questionnaire*

The frequency of a last-resort tactic being used was measured using the Discipline Practices Questionnaire (see Appendix D). This measure asked mothers the number of times they had used certain discipline tactics during the past week. To determine the frequency of a mother using her last-resort tactic, the response identifying their last-resort tactic in the Structured Open-Ended Interview was matched to the closest item on the Discipline Practices Questionnaire. After doing so, the specific item asking the mother how often she had used that discipline technique provided an estimate of the frequency with which the mother used her last-resort tactic in the past week.

This is a new instrument but it is patterned after questions about disciplinary enforcement tactics used in the Home Observation for Measurement of the Environment (HOME) Inventory, a widely used measure developed to assess the quality of stimulation available to the child in the home (Caldwell & Bradley, 1984). Similar to the HOME Inventory, the Discipline Practices Questionnaire asks how frequently the mother has used each discipline tactic in the past week. Because this is a new instrument, reliability and validity has not been established, but the Birth to Three HOME Inventory, a measure that has been used extensively in studies of children's cognitive development, has demonstrated high internal consistency. Using the KR-20 formula (Nunnally & Bernstein, 1994), internal consistency was calculated to be .89 for the total HOME and averaged .70 for the six subscales (Caldwell & Bradley, 1984). Because this study is

using only one item from this questionnaire for each case, no reliability statistic could be calculated.

#### *Child Behavior Checklist for Ages 1 ½ - 5*

Two negative child outcomes were measured using the Child Behavior Checklist for Ages 1 ½ -5 (CBCL 1 ½-5), the young child version of the most widely used measure of children's behavior problems (Achenbach & Rescorla, 2000). This study used its two broadband scales. One scale, *Internalizing Problems*, consists of problems that are primarily within one's self, such as withdrawal or depression. The second scale, *Externalizing Problems*, consists of problems that usually involve conflicts with other individuals, such as aggression (Achenbach & Rescorla, 2000).

The CBCL for Ages 1 ½ -5 has been found to demonstrate relatively high internal consistency as results have shown all or most of the items of this questionnaire to be measuring the same underlying constructs (Internalizing and Externalizing Problems). Achenbach and Rescorla (2000) demonstrated this as they calculated coefficient alphas of .89 for the internalizing subscale, and .92 for the externalizing subscale. In this study, the CBCL for Ages 1 ½ - 5 exhibited good internal consistency, as the coefficient alpha was .78 for the internalizing subscale, and .90 for the externalizing subscale.

#### *Early Childhood Behavior Questionnaire (ECBQ)*

The child competence outcome *Effortful Control* was measured with three subscales from the ECBQ (Putnam, Gartstein, & Rothbart, 2006). This is one of a series of widely used measures of temperament that consists of 36 items designed to assess the child's effortful control abilities using three subscales measuring inhibitory control,

attention shifting, and attention focusing. The three subscales have been adapted to measure effortful control.

The ECBQ has been found to demonstrate relatively high levels of internal consistency. Coefficient alphas of .89 for the inhibitory control subscale, .71 for the attention shifting subscale, and .86 for the attention focusing subscale have been calculated (Putnam et al., 2006). In this study, this measure of effortful control exhibited good internal consistency, with a coefficient alpha of .80.

#### *Problems for the Day*

Negative child outcomes were also measured using the Problems for the Day questionnaire (see Appendix E). This measure consists of 15 items describing the difficulty of a child's behavior problems over the past 24 hours. Fourteen questions were of the form, "During the past 24 hours, did [child's name/he/she] have any problems with ...waking up?" Answers of "No" were scored as 0. If the mother answered, "Yes," she then rated the difficulty of handling that situation on a scale from 1 to 5. The 15<sup>th</sup> item was, "Overall, how difficult was [child's name] to deal with the past 24 hours, using the same 5-point scale?"

This particular measure is an adaptation from the Child Conflict Index (CCI) developed by Frankel and Weiner (1990) which was later used by Ritchie (1999). The CCI was designed to assess parent reports of the previous day, and has exhibited moderately high levels of internal consistency. Using the KR-20 formula (Nunnally & Bernstein, 1994), the internal consistency for the CCI was .78 for phone calls 2 and 3, and .79 for phone calls 4 and 5 when assessing young boys (Frankel & Weiner, 1990). When assessing young girls, the internal consistency as .70, .72, .77, and .76 for phone

calls 2, 3, 4, and 5, respectively. In this study, the Problems for the Day questionnaire exhibited adequate internal consistency, as the coefficient alpha was .72.

To assess each child's difficulty level, this study calculated the mean level of difficulty of behavior problems identified for that day. Because this questionnaire was used twice, once in the face-to-face interview, and once in the phone interview, the average of the two mean levels of difficulty of behavior problems in a day were obtained to provide one difficulty score.

### *Data Analysis*

This current study tested the proposed hypotheses using various statistical methods. To address the first hypothesis, descriptive statistics were used to determine if physical discipline, time-out, isolation, and power assertion were listed as a last-resort tactic by 50% or more of the mothers of children between 18 and 30 months of age.

To address the remaining hypotheses, correlation coefficients were calculated to determine the strength of the relationship between continuous variables including last-resort tactic rated intensity, last-resort tactic frequency, maternal negative affect for using last-resort tactics, child age, child externalizing problems, child internalizing problems, child mean difficulty of daily problems, and child effortful control. Student *t*-tests were also used in this study to examine differences in mean scores between the physical last-resort tactic group and the non-physical last-resort tactic group in relation to the other variables including child age, maternal negative affect for using last-resort tactics, and the four child outcome variables of externalizing problems, internalizing problems, mean difficulty of daily problems, and effortful control.

For the second hypothesis and for some post hoc analyses, multiple regression was used to test the association of two predictors on one or more outcome variables. For the second hypothesis, the two predictor variables were type of last-resort tactic (physical vs. non-physical) and last-resort tactic frequency. This analysis also included the interaction of these two variables to determine whether the association of tactic frequency varied by type of last-resort tactic. It is recognized that the statistical power was low for testing this interaction.

Multiple regression was also used for unplanned post hoc analyses. These analyses were used to help explain the findings on the planned hypotheses. One set of analyses investigated whether child age could account for some findings. Another analysis tested a suppressor effect, whereby the associations of negative affect for using last-resort tactics and type of last-resort tactic might have a stronger combined effect on externalizing problems than evident when analyzed separately.

## CHAPTER IV

### RESULTS

A one-tailed test was used throughout the analyses because the majority of the hypotheses are directional and because this is an initial exploratory study of last-resort tactics using a small sample size. These findings need to be confirmed with larger sample sizes. Larger studies might also find additional significant associations (e.g., for correlations greater than  $|.10|$ ).

Many hypotheses were tested with correlations between characteristics of last-resort tactics and other parenting or child-outcome variables. Other tests compared physical last-resort tactics versus non-physical last-resort tactics on other variables. Significance at  $p < .05$  for a two-tailed test will be indicated with  $p < .025$ , one-tailed.

#### *Last-Resort Tactics*

The first hypothesis was that the majority of the mothers in this study would report using either physical punishment, time-out, isolation, or physical power assertion as their last-resort tactic. The last-resort tactics identified by mothers are shown in Table 1. Consistent with the hypothesis, the three most frequent last-resort tactics in order were spank (45%), time-out (16%), and isolation (13%). Counting two mothers who reported slapping the child's hand as their last-resort tactic, 80.7% identified one of the hypothesized last-resort tactics. Contrary to this hypothesis, physical power assertion was not listed as a last-resort tactic in this study. The most common other last-resort tactic

reported was redirection (9.7%). In summary, mothers of toddlers report using a wide range of last-resort tactics, with the most common being physical punishment, time-out, isolation, and redirection.

Table 1

*Frequency of Use and Negative Affect of Types of Last-Resort Tactics Reported by Mothers*

Last-Resort Tactic	<i>n</i> (%) of Mothers	Mean	
		Weekly Frequency <sup>a</sup>	Negative Affect
Held to Soothe	2 (6.5%)	2.5	4.5
Redirect	3 (9.7)	4.7	4.0
Ignore	1 (3.2)	3.0	5.0
Time-Out	5 (16.1)	1.6 <sup>b</sup>	4.6
Isolation	4 (12.9)	1.3 <sup>b</sup>	5.5
Slap Hand	2 (6.5)	0.0	3.5
Spank	14 (45.2)	1.4	4.0

*N* = 31

<sup>a</sup>Frequency of use during past week, whether used as a last resort or not.

<sup>b</sup>The frequency of time-out and isolation were combined in a single item.



Table 2

*Mean Scores by Type of Last-Resort Tactic*

	Physical	Non-physical	<i>t</i> -value
Child Age	23.9	21.6	-2.07**
Negative Affect	3.9	4.7	1.54
Child Outcomes			
Externalizing	16.3	11.6	-1.74*
Internalizing	10.6	9.5	-.58
Difficulty <sup>a</sup>	1.0	1.2	.93
Effortful Control	4.3	4.3	.13

*N* = 31

<sup>a</sup>Mean difficulty of daily problems for two days.

\**p* < .05; \*\**p* < .025 (all one-tailed tests).

*The Role of Child Age*

The third hypothesis stated that last-resort tactics would become more intense or forceful with the child's age, and physical discipline would be a more common last-resort tactic for older toddlers in comparison to younger toddlers. The second hypothesis concerns child outcomes and will therefore be summarized with the other child-outcome hypotheses later in the Results section. Consistent with this hypothesis, it turned out that the intensity of the last-resort tactic increased with age,  $r = .35$ ,  $p < .05$ , one-tailed. In addition, physical discipline ( $M$  age = 23.9 months) was used as the last-resort tactic for

significantly older children than non-physical discipline tactics ( $M$  age = 21.6 months;  $t(29) = -2.07, p < .025$ , one-tailed, see Table 2). Therefore, mothers of young preschool children may find it more acceptable to use more intense last-resort tactics as their child matures.

### *The Role of Maternal Negative Affect*

The fourth hypothesis was that there would be a positive correlation between the last-resort intensity and the level of negative maternal affect when using their last-resort tactic. In particular, a physical last-resort tactic would be associated with more negative affect than a non-physical last-resort tactic. The findings failed to support this hypothesis as it turned out that negative affect decreased as last-resort intensity increased,  $r = -.17$ , but this negative correlation was not significant. Similarly, negative affect was higher for non-physical last-resort tactics ( $M = 4.7$ ) than for physical last-resort tactics ( $M = 3.9$ ;  $t(29) = 1.54$ ; see Table 2), but this was also not significant. In summary, maternal negative affect for using last-resort tactics was found not to be associated with intensity or type of last-resort tactic used, and the non-significant trend was for negative affect to be less for more intense last-resort tactics.

The range of negative affect for using last-resort tactics varied greatly. There was a wide range of responses from no negative feelings to extremely negative feelings (e.g., I feel like I'm a horrible mother). The median was moderately negative feelings (e.g., an unqualified feeling described as "frustrated" or "bad").

Table 3

*Correlations Between Last-Resort Characteristics and Child Outcomes*

Child Outcomes	Last-Resort		
	Intensity	Weekly Frequency <sup>a</sup>	Negative Affect
Externalizing	.24 <sup>c</sup>	-.14	.25 <sup>c</sup>
Internalizing	-.03	-.18	.01
Difficulty <sup>b</sup>	-.11	-.01	.28 <sup>c</sup>
Effortful Control	-.03	.27 <sup>d</sup>	-.13

*N* = 31

<sup>a</sup>Frequency of use during past week, whether used as a last resort or not.

<sup>b</sup>Mean difficulty of daily problems for two days.

<sup>c</sup> $p < .10$ , one-tailed.

<sup>d</sup> $p < .10$ , one-tailed (wrong direction).

*Influences Upon Child Outcomes*

The second hypothesis stated that the frequency of all last-resort tactics would be positively associated with problem outcomes and negatively associated with the competence outcome. The correlations between last-resort tactic frequency and child outcomes are shown in Table 3. The findings failed to support this hypothesis as the only trend toward significance was in the opposite direction, as frequency was positively associated with effortful control,  $r = .27$ ,  $p < .10$ , one-tailed. Last-resort tactic frequency was negatively correlated with the problem outcomes, but these relationships were not

significant, as last-resort tactic frequency was negatively correlated with externalizing problems,  $r = -.14$ ; internalizing problems,  $r = -.18$ ; and mean difficulty of daily problems,  $r = -.01$ . Therefore, frequency of last-resort tactics was not related to child outcomes. Moreover, the non-significant trends suggest better outcomes for high frequency of use, contrary to the hypothesis.

An elaboration of the second hypothesis was that the associations between last-resort frequency and child outcomes would be similar for physical and non-physical last-resort tactics. This was tested with a series of multiple regression analyses that included last-resort frequency, type of last-resort tactic (physical vs. non-physical), and their interaction as predictors of each of the child outcomes, tested one at a time. The multiple regression analyses found that the interactions were never significant so the effect of frequency did not differ by type of last-resort tactic, supporting the hypothesis,  $t_s(27) < |1.11|$ ,  $ps > .27$ . However, it must be noted that the statistical power for testing this hypothesis was especially low, due to the small sample size.

The fifth hypothesis was that maternal negative affect about using last-resort tactics would be positively associated with detrimental child outcomes and negatively associated with the competency outcome. This hypothesis was marginally supported by two findings as negative affect was correlated slightly with externalizing problems,  $r = .25$ ,  $p < .10$ , one-tailed, and mean difficulty of daily problems,  $r = .28$ ,  $p < .10$ , one-tailed (see Table 3). Maternal negative affect was not correlated with internalizing problems,  $r = .01$ , and had a non-significant negative correlation with effortful control,  $r = -.13$ . In summary, higher levels of maternal negative affect when using last-resort tactics was marginally associated with adverse child outcomes.

The sixth hypothesis stated that the intensity of last-resort tactics would be positively associated with more adverse child outcomes, and child outcomes would be more adverse in families using physical discipline compared to those using milder techniques as a last-resort tactic. The hypothesis was partially supported as the correlation between last-resort tactic intensity and externalizing problems was marginally significant,  $r = .24$ ,  $p < .10$ , one-tailed (see Table 3). In addition, externalizing problems were significantly higher for the physical last-resort tactic group ( $M = 16.3$ ) in comparison to the non-physical last-resort group ( $M = 11.6$ ;  $t(29) = -1.74$ ,  $p < .05$ , one-tailed, see Table 2).

The remaining three child outcomes' correlations with last-resort tactic intensity were not significant (see Table 3). In addition, there were no significant differences in these three child outcomes (internalizing problems, mean difficulty of daily problems, and effortful control) when comparing the physical and non-physical last-resort tactics groups. In summary, the intensity of last-resort tactics is associated with marginally higher levels of externalizing problems in children.

### *Combining Hypotheses*

Two additional questions were raised by the pattern of results. The first was whether the marginally significant outcomes of characteristics of last-resort tactics (in Table 3) might be due to age differences in the children. Multiple regression analyses that controlled for child age did not change the associations between the last-resort characteristics and the child outcomes. After controlling for child age, all the marginally significant associations in Table 3 remained marginally significant,  $p < .10$ , one-tailed.

Therefore, the marginally significant correlations in Table 3 were not artifacts due to child age.

The second question was whether the correlational “effects” of last-resort intensity and negative affect on externalizing problems would be amplified when controlling statistically for each other. This was tested by using a multiple regression analysis predicting externalizing problems from both last-resort intensity and negative affect. Then the standardized regression coefficients were amplified, becoming larger than the corresponding correlations in Table 3, but remained marginally significant even with a one-tailed test. Last-resort intensity and negative affect had regression coefficients of .29 and .30, respectively, both predicting greater externalizing problems.

Table 4

*Standardized Regression Coefficients Predicting Externalizing Problems*

Predictor Variable	$\beta$	$t$
Physical Punishment (vs. other)	.41	2.34**
Negative Affect	.36	2.08**

$N = 31$

\*\* $p < .025$ , one-tailed

When, however, last-resort intensity was categorized as either physical punishment or other in a multiple regression analysis, then both physical punishment and

negative affect predicted greater externalizing problems,  $\beta$ s = .41 and .36, respectively,  $ps < .025$  (see Table 4).

## CHAPTER V

### DISCUSSION

The primary purpose of this study was to provide some initial, preliminary information about last-resort discipline tactics used by mothers of young children. This was accomplished by examining six initial research questions about how last-resort characteristics were associated with child age, frequency of use, maternal negative affect, and four child outcomes.

There were several key findings that emerged from this study. First, this study found that there is a wide range of last-resort tactics used by mothers of children between 18 and 30 months of age. Last-resort tactics ranged from holding children to soothe them to spanking. This indicated large differences in levels of forcefulness of last-resort tactics used by mothers of toddlers. Half of the mothers in this study used physical discipline as their last-resort discipline tactic (either slapping the child's hand or spanking). This finding demonstrates that spanking is a tactic that is still widely used today despite the controversy over whether it should be used. Consistent with the first hypothesis, 80.7% of the mothers used physical punishment, time-out, or isolation as their last-resort tactic. Contrary to the hypothesis, physical power assertion was never reported as a last-resort tactic. Redirection was the most common other last-resort tactic. This may be because redirection is a popular tactic for mothers to use with younger children, as it is an easy way to end negative behavioral situation without using much force.



A second key finding was that last-resort tactic intensity increased with child age from 18 to 30 months. In addition, physical discipline was more likely for older children in comparison to younger children in this age range, which is consistent with Straus and Stewart's (1999) national survey of the prevalence of physical punishment by age. This finding also corresponds with Verzemnieks' (1999) findings that mothers may be using more forceful physical discipline tactics as the child gets older. This relationship between child age and last-resort tactic intensity may be due to two possible explanations. First, this may be attributed to mothers believing that physical punishment is more acceptable as the child gets older, which is consistent with Socolar and Stein's (1996) findings that maternal beliefs in the use of spanking, teaching, and a negative disciplinary approach increased with child age. As children get older, parents may hold their child responsible for more misbehavior occurrences and view more forceful last-resort tactics as acceptable discipline techniques. Second, this could occur due to an increase in behavior problems as the child ages, which is consistent with Larzelere et al. (1992), who found age-related increases in physical aggression and oppositional behavior among children until 30 to 36 months of age. As children get older and misbehave more often, parents may need to rely on more forceful last-resort tactics to address these increases in behavior problems.

Third, the association between negative affect and last-resort intensity was contrary to the fourth hypothesis. If anything, negative affect was found to be greater for less intensive last-resort tactics in comparison to more intensive last-resort tactics, although this negative correlation never approached significance. This may occur as longer discipline sequences may be taking place between children and their mothers using less intense last-resort tactics when compared to children and their mothers using

more intense last-resort tactics. Physical discipline has been found to be positively associated with immediate compliance (Gershoff, 2002); therefore, non-physical last-resort tactics may be associated with longer discipline episodes. When this occurs, there is more time for a mother's level of negative affect to increase across the episode, which may result in mothers having high levels of negative affect when using their last-resort tactic.

Fourth, scattered marginally significant child outcomes were found to be associated with last-resort characteristics. Of the twelve hypothesized correlations listed in Table 3, four were marginally significant with a one-tailed test. One of those four correlations was opposite from the direction predicted, as higher frequency of a last-resort tactic was associated with higher levels of effortful control. Perhaps mothers considered their children more responsible for misbehavior when they showed more effortful control. Perceived intentionality might increase mothers' willingness to use their last-resort tactic more frequently.

Two of the three hypothesized child outcomes were marginally adverse outcomes of negative affect when using last-resort tactics. Both externalizing problems and difficulty of daily problems in children were marginally correlated with maternal negative affect. Therefore, mothers who feel negative when they are using their last-resort tactic may be detrimentally influencing their children. Alternatively, children's behavioral problems may cause parents to feel more negative when they are pushed to use their last-resort tactic, or more upset when their child is behaving worse.

The fourth marginally significant child outcome associated with a last-resort characteristic was the finding that the intensity of last-resort tactics was only marginally

associated with one outcome, externalizing problems in children. Externalizing problems was also the only outcome that differed significantly for physical discipline versus non-physical discipline last-resorts (one-tailed test). This is consistent with the usual positive association between spanking and externalizing problems (Gershoff, 2002). Because this study is cross-sectional, a conclusion cannot be made whether this correlation reflects a child effect, a parent effect, or the effect of another influence.

Additional post hoc analyses found that none of the marginally significant outcomes of last-resort characteristics were artifacts of child age. Finally, when considering both type of last-resort tactic and negative affect for using last-resort tactics simultaneously, both variables predicted greater externalizing problems. These became clearly significant when last-resort tactics were categorized as physical or non-physical punishment. This is consistent with the possibility that both negative affect and physical discipline cause increases in externalizing problems, controlling for each other. These effects could have been suppressed in the simpler analyses because physical discipline is associated with less negative affect, but not significantly so. An alternative explanation is that a difficult child temperament makes mothers more likely to use spanking as their last-resort and to get more upset emotionally when using any last-resort tactic. Identifying the correct causal direction is essential for making the right applications, but a cross-sectional study such as this cannot make this distinction.

Finally, this study discovered that there was a wide range of responses of how negatively mothers feel when using their last-resort tactic. One mother said “it’s a necessity...It’s just something that has to be done,” demonstrating no negative feelings. At the other extreme, two mothers in this sample reported having an extremely negative

level of negative affect. Sample responses included “I feel like I’m a horrible mom,” and “It’s frustrating...it’s just like this rage...it’s just like this overwhelming anger and frustration.” Having this level of negative affect when using a last-resort tactic may be detrimental for the child. This study did not distinguish between different types of negative affect (e.g., frustration, sadness, guilt), but it is important to acknowledge that some kinds of negative feelings about using last-resort tactics might have different implications than others. For example, anger, stress, and frustration might be associated with risk for escalation more than guilt, which might predict inconsistency. Despite this lack of differentiation among different types of negative affect, both parental inconsistency and abuse have been found to be detrimental for children. Guilt may be associated with parental inconsistency, which has been shown to predict adverse child outcomes, such as antisocial behavior (Gardner, 1989), and increases in some types of negative affect (e.g., frustration, anger) could increase the risk for child abuse. When mothers become frustrated or their level of negative affect increases, the possibility of escalation to abuse may increase, as well as the risk of detrimental child outcomes.

### *Implications*

This study has possible implications for the practice of disciplinary enforcements. First, there are political implications as many countries are currently being faced with deciding whether to ban spanking or allow it to remain as a legal parenting practice. This study has found evidence for both sides of this debate. Evidence for the ban on spanking includes the finding that externalizing problems were higher in children in the physical last-resort group in comparison to the non-physical last-resort group, which is consistent with Gershoff’s (2002) findings. In addition, when negative affect and the type

of last-resort tactic were considered together, both negative affect and physical punishment predicted greater externalizing problems in children. If these associations are due to parent effects, then these findings support a spanking ban.

On the other hand, evidence for the conditional spanking position (Benjet & Kazdin, 2003) was that there were no significant differences between groups (physical vs. non-physical) in internalizing problems, mean difficulty of daily problems, and effortful control. In addition, the findings supporting the ban on spanking must be interpreted with caution, as these findings may be due to child effects (e.g., temperamental differences). Despite these different findings, there is a need to know what effective tactics parents can still use if traditional tactics are banned, and if these tactics remain legal.

An additional implication of these findings is that *how* a last-resort tactic is used may be more important than what tactic is used. Different ways that mothers may use a last-resort tactic may have a profound impact on how the child responds to last-resort tactics. Important differences include maternal negative affect when using last-resort tactics, frequency of its use, when it is used within a discipline sequence, consistency of its use across multiple situations, and how it is implemented.

One main influence that affects how a last-resort tactic is used is maternal negative affect when using last-resort tactics. For example, if a last-resort tactic is used as a mother is displaying high levels of negative affect, according to this study, the child may have higher levels of externalizing problems and higher level of daily problems. In addition, negative affect was associated with externalizing problems regardless of what type of last-resort tactic was used. More causal evidence is needed in order to determine if this relationship is due to a child effect that causes parents to become more negative, if

the negativity by parents is causing children to have more externalizing problems, or if this correlation is due to a third variable. One possible speculation is that if there is a banning on spanking, it may cause parents to have more negative affect when having to resort to other types of last-resort tactics. Some evidence for this is that after spanking was banned in Sweden, parents were higher on coercive verbal tactics than were American parents (Palmerus & Scarr, 1995).

A second influence that affects how a last-resort tactic is used is the frequency with which it is used. This study found that a higher frequency of a last-resort tactic was associated with higher levels of effortful control. This was opposite of the predicted association, but frequency may play a role in other studies with a higher level of statistical power.

Third, when a last-resort tactic is used within the discipline sequence may be important for how children respond to the last-resort tactic. For example, if a mother uses a last-resort as the first response to noncompliance (first-resort tactic), and does not implement it as a step following less intense tactics such as reasoning, warnings, or time-outs, the child may not learn to cooperate with milder disciplinary tactics according to the conditional sequence model (Larzelere, 2001).

The sequencing of a mother's discipline responses also plays a role in the fourth influence of how a last-resort tactic is used. If the last-resort tactic is used at unpredictable points in the sequence, inconsistency in disciplinary practices may result in greater child problems such as antisocial behavior and negative affect (Acker & O'Leary, 1996; Gardner, 1989).

Finally, how a last-resort tactic is implemented may play a role in how a child responds. Many parents do not know how to properly use their last-resort tactic in the most effective manner. For example, parents may give their child excessive attention while the child is in time-out, or parents may exceed the recommended number of warnings before a last-resort tactic is used. Behavioral parent training may work partly because it teaches parents how to use time-out and other disciplinary actions in the most effective way (Hembree-Kigin & McNeil, 1995). For behaviorally difficult children this includes an explicit back-up procedure to enforce time-out.

### *Limitations*

This study has several important limitations. A major limitation is that the sample size in this study was small. Therefore, the significant or marginal findings were based on one-tailed tests. As a result, the findings of this study may not reflect the true strength of certain relationships between variables. A larger sample size would yield better estimates of the true relationships between variables, yielding greater confidence in the results and would probably include more significant findings. In addition, smaller sample sizes create questions concerning the generalizability of the findings to other populations in future studies.

Second, this study used a cross-sectional design and only provides a snapshot of the role of last-resort tactics in families with young children. In general, causal conclusions cannot be made about whether negative affect for using last-resort tactics and intensity of last-resort tactic causes more adverse child outcomes. A longitudinal design is needed to help strengthen causal inferences between variables and determine if any third variables are influencing the relationships found between certain variables in this

study. Such studies can follow children over time and help provide more accurate insights into long-term causal effects of various last-resort characteristics on child well-being without relying on retrospective accounts of childhood discipline from adults and adolescents.

Third, the participants in this study were primarily white mothers and their children, which does not provide a completely accurate picture of last-resort tactics in other ethnic groups. Several studies have found differences in child outcomes of physical punishment (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Gunnoe & Mariner, 1997), but more research is needed about ethnic differences concerning last-resort tactics. Research on more diverse groups of people can help guide disciplinary decisions that are appropriate and sensitive to cultural differences.

Fourth, operationalization of two key variables may serve as limitations to the findings of this study. First, the structured open-ended interview asked the mothers “how do you feel when *his/her* misbehavior gets to this point?” referring to how they feel when using their last-resort tactic. This particular question measuring a mother’s level of negative affect when using their last-resort tactic may not identify differences in negative feelings. For example, a mother could feel angry with their child but sad about having to spank them. As previously discussed, there are different implications for different types of feelings (e.g. anger vs. sadness). Therefore, it would be important in future studies to formulate a more precise question that measures the level of each type of negative affect a mother may have when using last-resort tactics. Next, the variable, last-resort tactic frequency, may not accurately represent the true value of last-resort tactic frequency, which in turn might have skewed the data. This study assumes that the frequency of a



mother's last-resort tactic is estimated by the overall frequency of using that tactic as reported in the Discipline Practice Questionnaire. Mothers may have a last-resort tactic but may employ that particular tactic at different points in the discipline sequence and not always as a last-resort.

Fifth, this study only utilized mothers' reports as sources of information regarding the child's behavior and discipline experience. It would be more beneficial to include multiple sources, such as father reports, as well as including some observational data by observing the parent-child interaction in the home setting.

An additional limitation is that social desirability may have influenced the findings as the mothers in this study may have provided responses that reflected socially acceptable behaviors and attitudes. This limitation reinforces the need for the use of multiple sources of data collection. Questions asking mothers how many times they have yelled at their child, shamed, or spanked their child may be answered less accurately to make a good impression or present a positive image of good parenting.

#### *Future Research*

There are several questions that have emerged from this initial study of last-resort tactics. First, are mothers using last-resort tactics as part of a systematic plan that they follow or are they using last-resort tactics because their plan does not work? Future studies need to make this distinction as it may provide data that describes whether these tactics are planned and thought out, or if they are more reactive in nature.

Second, are the correlations found in this study due to causal effects? Research conducted in the future needs to determine the causal influences underlying these correlations. In particular, are these relationships with child outcomes primarily due to

child effects (e.g., temperamental differences) or due to parent effects (e.g., parental inconsistency)? One step in this direction would be the use of longitudinal research, as this type of research design can help clarify the causal direction underlying these associations.

Third, what last-resort tactics are the most effective? A gap within the discipline research that needs to be addressed is discriminating between effective versus counterproductive discipline tactics, especially last-resort tactics. Most studies of parental discipline focus on the relationship between using one type of tactic, such as spanking, and some child outcomes, without taking into account the disciplinary situation or comparing it directly with alternative tactics in the same situation. Both perspectives on the spanking controversy need to discriminate between effective versus counterproductive last-resort tactics in order to enhance contemporary understanding of parental discipline. Correlational evidence may be biased against all disciplinary enforcements (Larzelere et al., 2004). If spanking can be an effective last-resort tactic under some limited situations, those situations need to be identified. On the other hand, anti-spanking advocates need evidence about what alternatives are more effective than spanking as a last-resort tactic if they are going to ban spanking as an option for parents to use.

We need to learn much more about last-resort tactics. This study has suggested that how maternal negative affect when using a last-resort may be an important factor as well as the tactic that they use, demonstrating the need for mothers to know how to use a last-resort tactic effectively without having high negative affect. Future research needs to determine the causal effects that explain these correlations. Effects of last-resort

characteristics may also depend upon other factors that have been overlooked in this study. Nonetheless, these limitations and these future questions demonstrate that we need to learn more about last-resort tactics, as this study has provided a small start on a much bigger task.

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## APPENDICES

Appendix A

Demographic Questionnaire



### Demographic Information

ID #: \_\_\_\_\_ Your Age: \_\_\_\_\_ Your Date of Birth: \_\_\_\_\_

1. What is your current relationship status, e.g., marital status?

Married

Separated

Cohabiting

Single

2. If married or cohabiting, how long have you been living together? \_\_\_\_\_ years

3. How many children under 18 live in your home at least 50% of the time? \_\_\_\_\_

4. What race do you consider yourself? Please circle all that apply.

White

Black

Native American

Asian

Other:

5. Do you consider yourself to be Hispanic? Yes No

6. What is the highest level of education you have completed?

Less than high school diploma

Circle highest grade you completed: 5 6 7 8 9 10 11

High school diploma or GED

Some College

Technical or Trade School

Associate Degree

Bachelor Degree

Some Graduate School

Master's Degree

Doctoral or Professional Degree

7. Are you currently working in a job for pay? Yes No [go to #9]

8. [If yes] How many hours do you work at your paid job in a typical week? \_\_\_\_\_

9. What type of job do you currently have or most recently had?

10. What is or was your job title? \_\_\_\_\_

(over)

11. Please describe your main job duties:

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12. What is your total household income per month?

Under \$500

\$500 to \$1,000

\$1,000 to \$1,500

\$1,500 to \$2,000

\$2,000 to \$2,500

\$2,500 to \$3,000

Over \$3,000

Thank you.

Appendix B

Structured Open-Ended Interview

Interviewer: \_\_\_\_\_ Date of Interview: \_\_\_\_\_ Location: Home O&CC Other \_\_\_\_\_

*[Verify that the 3 brief questionnaires were completed. If not, ask the mother to complete them first.]*

### Structured Open-Ended Interview

There are many different opinions about how parents should handle their children's misbehavior. Every family handles these things differently. So we are doing this study to find out what you do every day to prevent and handle your child's misbehavior. We hope you will be as honest as possible. We want a realistic picture of the pressures you face every day. We will be asking you specific details about your discipline practices. Do you have any questions before we begin?

*[If multiple children]* We want to focus on only one of your children between 18 and 30 months old. I understand that we will focus on *[\_child's name\_]*. Is that OK?

1. Compared to other children who are the same age, how often does *[\_child's name\_]* misbehave?

Misbehaves less often

About the same

Misbehaves more often

2. How do you generally deal with *\_his/her\_* misbehavior?

Sometimes parents know when their child is about to misbehave.

3. What do you do to prevent *[\_child's name\_]* from misbehaving?

Some parents deal with a problem when the child first begins to misbehave. Others ignore small problems and don't deal with it unless it becomes a bigger problem..

4. What types of misbehavior do you ignore?

Most parents have a discipline tactic they use as a last-resort when nothing else works.

5. What last-resort action do you use when nothing else seems to work?

6. How do you feel when *\_his/her\_* misbehavior gets to this point?  
From time to time, parents change how they deal with their children's misbehavior.

7. During the last six months, what changes have you made in the way you deal with [\_child's name\_] misbehavior?
8. Why did you make those changes?

Thank you. This is very helpful for our study.

Next I would like you to complete this form for me. [*Give her Nurturing and Discipline Practices Questionnaire*] It asks about a wide range of actions that parents use to express their love or to deal with misbehavior.

After you fill it out, I'll ask you some detailed questions about 2 recent discipline episodes. OK?

## Appendix C

### Maternal Negative Affect for Using Last-Resort Tactics Scale

## **Maternal Affect Negativity for Using Last-Resort Tactics**

The mother's answers to the question about "How do you feel when his/her misbehavior gets to this point?" (that is, when she has to use her last-resort tactic) were rated according to how negative their feelings were, using the following 1 to 7-point scale:

- 1) No negative feelings at all (e.g., a necessity, don't feel guilty)
- 2) Slightly negative feelings
- 3) Somewhat negative feelings
- 4) Moderately negative feelings (e.g., "frustrated," "bad," "stressed")
- 5) Negative feelings (e.g., "feel guilty")
- 6) Very negative feelings ("felt horrible," "at my wit's end," "overwhelmed")
- 7) Extremely negative feelings ("I feel like a horrible mom"; Note negative self-attribution in contrast to attribution more to the particular incident in "felt horrible")

Qualifying statements and adjectives modified the negative rating from the unmodified examples above. Examples of qualifying adjectives: "pretty" stressful, "kinda" guilty, "probably" frustrated. What the mothers say in the rest of their answer also may be a basis for adjusting the rating of how negative she felt in either direction, from what it would be if the key feeling word(s) was used without any modification.

Appendix D

Discipline Practices Questionnaire



## Nurturing and Discipline Practices Questionnaire

How often have you done each of the following **in the past 2 days** (48 hours)?  
Please circle the most accurate number.

---

	Number of Times Done <b>in the Past 2 Days:</b>						
Held your child	0	1	2	3-5	6-10	11-20	21+
Kissed your child	0	1	2	3-5	6-10	11-20	21+
Hugged your child	0	1	2	3-5	6-10	11-20	21+
Said "I love you" to your child	0	1	2	3-5	6-10	11-20	21+
Encouraged your child to talk to you	0	1	2	3-5	6-10	11-20	21+
Helped your child develop a new skill	0	1	2	3-5	6-10	11-20	21+
Played with your child	0	1	2	3-5	6-10	11-20	21+
Encouraged your child to try something new	0	1	2	3-5	6-10	11-20	21+
Gave your full attention to your child for 2 minutes or more	0	1	2	3-5	6-10	11-20	21+
Gave your child a choice between two or more possibilities	0	1	2	3-5	6-10	11-20	21+
Allowed your child to interrupt something you were doing	0	1	2	3-5	6-10	11-20	21+

How often have you done each of the following **in the past week** (7 days)?

***Responses to Misbehavior***

---

	Number of Times Done <b>in Past Week:</b>						
Asked child why she/he is acting that way	0	1	2	3-5	6-10	11-20	21+
Restated a rule <i>(You know you need to share your toys)</i>	0	1	2	3-5	6-10	11-20	21+
Described a natural consequence <i>(If you do not share, other children will not want to play with you)</i>	0	1	2	3-5	6-10	11-20	21+
Explained why they should not behave like that	0	1	2	3-5	6-10	11-20	21+
Suggested a compromise	0	1	2	3-5	6-10	11-20	21+
Scolded or disapproved firmly <i>(Using a "command tone" including loud tone of voice)</i>	0	1	2	3-5	6-10	11-20	21+
Shamed <i>(Name calling, you should know better than that, don't you know how much that upsets me)</i>	0	1	2	3-5	6-10	11-20	21+
Warned <i>(Counting, threatening, other statements used to warn)</i>	0	1	2	3-5	6-10	11-20	21+
Bribed or offered a reward for good behavior	0	1	2	3-5	6-10	11-20	21+
Yelled	0	1	2	3-5	6-10	11-20	21+
Said you don't love her/him when misbehaving	0	1	2	3-5	6-10	11-20	21+
Suggested a reason for misbehavior <i>(tired due to no nap that day, hungry)</i>	0	1	2	3-5	6-10	11-20	21+

## ***Responses to Misbehavior***

---

	Number of Times Used in Past Week:						
Purposely ignored child	0	1	2	3-5	6-10	11-20	21+
Distracted or redirected child	0	1	2	3-5	6-10	11-20	21+
Forced compliance <i>(taking child to where you want her/him to go, making child eat)</i>	0	1	2	3-5	6-10	11-20	21+
Held to soothe or comfort child	0	1	2	3-5	6-10	11-20	21+
Restrained child	0	1	2	3-5	6-10	11-20	21+
Modeled or demonstrated appropriate behavior	0	1	2	3-5	6-10	11-20	21+
Put child in time out or isolation	0	1	2	3-5	6-10	11-20	21+
Took away a privilege <i>(not allowed to watch television, taking away a toy)</i>	0	1	2	3-5	6-10	11-20	21+
Involved another person in the situation <i>(other parent or family member mentioned or physically present)</i>	0	1	2	3-5	6-10	11-20	21+
Slapped child on the hand	0	1	2	3-5	6-10	11-20	21+
Spanked child	0	1	2	3-5	6-10	11-20	21+
Other disciplinary action not listed	0	1	2	3-5	6-10	11-20	21+

Please specify: \_\_\_\_\_

Appendix E

Problems for the Day

### Problems For The Day

Next [First], I want to ask about any misbehavior problems you had with [child's name] during the past 24 hours.

I'll ask you to rate the difficulty of each misbehavior problem on a 5-point scale [(if phone) which we left with you].

[Hand her or remind her about the Response Options sheet] This shows the 5 options for Misbehavior Difficulty

During the past 24 hours, did [child's name/he/she] have any problems with the following activities? [Repeat question after difficulty rating and after 4 No's in a row.]

[If Yes] On a scale from 1 to 5, how difficult was it to handle that situation. [1 represents no difficulty and 5 stands for extreme difficulty.]

	Interview 1					Interview 2					Interview 3				
	Yes or No?		Difficulty*			Yes or No?		Difficulty*			Yes or No?		Difficulty*		
	If Yes →		1=None, 5=Extreme			If Yes →		1=None, 5=Extreme			If Yes →		1=None, 5=Extreme		
Waking up?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Getting dressed?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Eating?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Siblings or peers?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Being overactive?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Wanting to do something?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Not wanting to do something?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Wanting an object?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Interrupting?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Not picking up?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Making a mess?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Getting undressed?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Bathing?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		
Going to bed?	YES NO		1 2 3 4 5			YES NO		1 2 3 4 5			YES NO		1 2 3 4 5		

[If 1+ situations with 2+ difficulty scores, skip to B below. If not ask the next 4 questions]

During the last 24 hours, was your child [fill blank with 4 items below]:

[If Yes] How difficult was it to handle that situation (those situations), using the same 5-point scale [repeat scale if needed]

Aggressive?	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5
Defiant?	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5
Throwing tantrums?	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5
Negotiating too much?	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5	YES NO	1 2 3 4 5

B. Overall, how difficult was [child's name] to deal with the past 24 hours, using the same 5-point

1= not difficult at all	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3=moderately difficult;			
5=extremely difficult			

#### SCRIPT:

Review the Difficulty Rating provided above. Use only ONE of the following scenarios, then go to the next worksheet.

[IF NO INCIDENTS HAD DIFFICULTY RATING ≥ 2]

You said that you did not have any difficult interactions with [child's name] in the past 24 hours. What is the most recent problem you had to deal with that was difficult? [at least somewhat difficult]

[IF ONE INCIDENT RANKED HIGHEST WITH A DIFFICULTY RATING ≥ 2]

You said that [child's name] was the most problematic interaction with [child's name] in the past 24 hours.

[IF MULTIPLES INCIDENTS WERE TIED FOR THE HIGHEST RANKING WITH DIFFICULTY RATINGS ≥ 2]

You said that more than one incident was difficult to deal with recently, including [list the ones tied by labels above]. Which incident would you say was the most difficult for you to deal with?

## Appendix F

### Institutional Review Board Approval

## Oklahoma State University Institutional Review Board

Date: Tuesday, October 21, 2008  
IRB Application No HE0875  
Proposal Title: Child Outcomes Associated with Last-Resort Tactics

Reviewed and Exempt  
Processed as:

**Status Recommended by Reviewer(s): Approved Protocol Expires: 10/20/2009**

Principal  
Investigator(s):

Kristin McDougal  
1123 S. Stanley  
Stillwater, OK 74074

Robert Larzelere  
233 HES  
Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

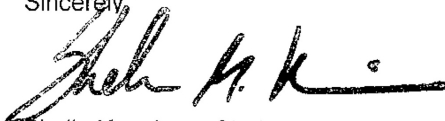
☒ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Shelia Kennison, Chair  
Institutional Review Board

## VITA

Kristin Lynn McDougal

Candidate for the Degree of

Master of Science

Thesis: A PRELIMINARY INVESTIGATION OF THE USE OF LAST-RESORT  
TACTICS TO DISCIPLINE TODDLERS

Major Field: Human Development and Family Science

Biographical:

Personal Data: Born in Plano, Texas on March 16, 1985. Parents are John and Pamela McDougal. Sister is Shannon McDougal. Brother is Ryan McDougal. Paternal grandparents are Robert and Viola McDougal. Maternal grandparents are Charles and Betty Crews.

Education: Graduated from James E. Taylor High School, Katy, Texas in May 2003; received a Bachelor of Science degree in Human Development and Family Science from Oklahoma State University, Stillwater, Oklahoma, in May 2007. Completed the requirements for the Master of Science degree in Human Development and Family Science at Oklahoma State University, Stillwater, Oklahoma in December 2008.

Experience: Raised in Houston, Texas. Employed by Oklahoma State University, Department of Human Development and Family Science, as a graduate teaching and research assistant, 2007 to present.

Professional Memberships: Phi Kappa Phi and Kappa Omicron Nu.



Name: Kristin Lynn McDougal

Date of Degree: December, 2008

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: A PRELIMINARY INVESTIGATION OF THE USE OF LAST-  
RESORT TACTICS TO DISCIPLINE TODDLERS

Pages in Study: 88

Candidate for the Degree of Master of Science

Major Field: Human Development and Family Science

Scope and Method of Study: The purpose of this study was to examine last-resort tactics used by mothers of toddlers. Participants in this study were 31 mothers and their children between the ages of 18 and 30 months old from central Oklahoma. The mothers completed questionnaires on demographics, discipline practices, and child behaviors at an interview assessment and a follow-up phone call.

Findings and Conclusions: This study found that a wide range of last-resort tactics were used by mothers of toddlers and that physical punishment is still widely used as a last-resort tactic despite the controversy of whether to ban its use. Older toddlers within this age range were disciplined with more forceful last-resort tactics when compared to younger toddlers. This study also found there a wide range of responses concerning how negatively mothers felt when using their last-resort tactic. Negative affect was marginally associated with externalizing problems and rated difficulty of daily problems in children. The frequency of last-resort tactics was marginally correlated with higher levels of effortful control in children, whether last-resort tactics were physical or non-physical. More forceful last-resort tactics were marginally correlated with greater externalizing problems, and children disciplined with physical last-resort tactics had significantly higher levels of externalizing problems when compared to children disciplined with non-physical last-resort tactics. When considering both type of last-resort tactic and negative affect simultaneously, both variables predicted greater externalizing problems in children. Longitudinal data are necessary to tell whether these associations are due to parent or child effects or a third factor.

ADVISER'S APPROVAL: Dr. Robert Larzelere

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