IMPACTS OF POSTMODERNITY FACTORS ON THE ASSOCIATION BETWEEN
MATERNAL DISTRESS AND CHILDREN’S DELINQUENCY
AMONG LOW-INCOME FAMILIES

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This study investigates the effects of postmodern factors on the relationship between maternal distress and children’s delinquency. It seeks to understand the factors associated with distress levels of mothers whose children exhibit delinquency in order to potentially decrease the cost associated with mental health problems especially in mothers. Another goal of this study is to contribute to the sociological analysis of mental health problems which seem to be the reserved domain of the discipline of psychology and related subfields. The data came from the third wave of the 3-city study with \( N = 1835 \). The ages of the children range from 5 to 18 years old. The analysis of the data using regression analysis suggests children’s delinquency significantly affects maternal distress in mothers. The study also indicates postmodernity factors did not moderate the association between maternal distress and children’s delinquency. However, postmodern factors have significant, separate, and direct effects on maternal distress. For example, employment and religion have positive influences on maternal distress. The research points toward weakness in the postmodern perspective. It also underlines the importance of a sociological approach to the assessment and treatment of distress problems among mothers with low-income. Agencies working with low-income families should integrate the sociological approach in their intervention programs. Additionally, the study uncovers possible problems with assessment criteria used by these agencies to determine eligibility for assistance among low-income families such as education levels; and consequently calls for further investigation.
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CHAPTER I
INTRODUCTION

The first chapter contains three sections. The first section consists of an introductory statement of the study. The second section, statement of the problem, describes the motivating factors that led to this research. The third section provides information justifying the importance of this project.

Introduction

In 2002, the Centers for Disease Control and Prevention (CDC) estimated that 25% of the American adult population was suffering from mental distress (CDC, 2011). This mental condition costs the U.S. government more than $300 billion in treatment, social services, disability payments, lost productivity, and premature mortality (CDC, 2011). This figure demonstrates that mental distress among the American population, including mothers, is real and can have multiple and devastating effects on individuals and on society as a whole.

The causes of mental distress among Americans are diverse and complex. For example, it has been shown that distress varies by time period (Thoits, 1999). An event that is found to be a source of distress for an individual early in life can be less distressing for the same individual later on. Distress not only changes with time but also by individual characteristics. For instance, a specific life change can be severely distressful for some individuals but not for others. Moreover, not just negative life events but positive ones as well have been associated with distress (Holmes & Rahe, 1967). More specifically, an event that is something to be cherished for one person can be a source of distress for another. For example, while the birth of a child may be associated with joy and happiness for some parents, it might be a source of distress for
others (Cutrona, 1984). With regard to maternal distress, which is of central interest for this study, such distress is found to be related to several factors, one of which is social environment.

This first set of factors of maternal distress, parental social environment, includes such variables as socioeconomic status (SES), social support, and marital status. Parents with low SES are at higher risk for distress than are parents who are at the higher end of the social and economic ladder (Horwitz, 2002). However, not all parents with low SES experience distress. The availability of positive social support can moderate the adverse influence of low SES on maternal distress level. Marital status and marital satisfaction also affect maternal distress. The second set of factors of maternal distress characteristics are sociodemographics (age, gender, race, and religion) and the type of parenthood (single-parenthood vs. 2-parents families).

A third set of factors is parenting activities and their challenges (Crnic & Acevedo, 1995). Daily parenting tasks, especially childcare activities, can take a toll on parents. For example, having to feed, clean, or monitor the activities and whereabouts of a child can be challenging for parents given that such activities can interrupt and disrupt the routines of parents. Sometimes a lack of experience in dealing with new situations involving children constitutes a source of maternal distress (Crnic & Acevedo, 1995).

The fourth set of factors related to maternal distress is child characteristics, which include such components as mental and physical handicaps and difficult behavior such as being inattentive, impulsive, or overactive, or exhibiting defiant behaviors (Mash & Johnston, 1990).

Of all these sets of factors, the most salient set is the last one of child characteristics (Hastings, 2002; Floyd & Gallagher, 1997; Hastings, 2003; Willoughby & Glidden, 1995). However, this present study focuses on delinquency, which is a component of children’s characteristics. Mothers, who are distressed as a result of everyday parenting activities, social
environment, and parental characteristics, perceive child behavior problems such as delinquency as very stressful (Crnic & Acevedo, 1995). In fact, in addition to meeting general parenting demands, parents of children with behavior problems have to deal with the behavioral challenges of their children. Certainly the extra energy needed to deal with these behaviors explains why parents identify children’s behavior problems as the most important determinant of parental distress (Baker, McIntyre, Blacher, Crnic, Edelbrock, & Low, 2003; Blacher, Shapiro, Lopez, & Diaz, 1997; Donenberg & Baker, 1993; Essex, Seltzer, & Krauss, 1999; Hastings, 2002; Floyd & Gallagher, 1997; Hastings, 2003; Willoughby & Glidden, 1995). Besides the disturbance they create in parents’ lives, children’s behavior problems sometimes provoke negative feelings in parents – frustration, anger, worry, fear, and guilt – thus triggering parental distress (Duchovic, Gerken&meyer, & Wu, 2009).

Statement of the Problem

Two problems have motivated this study. The first is related to the statistics concerning distress among American adults. In 2002, it was estimated that 25% of American adults were suffering mental distress (CDC, 2011). This alarming percentage constitutes an indication of the preponderance of mental health problems in the American population. The exorbitant cost ($300 billion) associated with this mental health issue necessitates thorough scholarly attention and further investigation (CDC, 2011).

The second problem is related to past research on parental distress. A review of the literature has revealed that almost all the studies on the topic have been conducted in the area of mental disability and other subfields of the discipline of psychology. Even though these past studies have yielded interesting findings, they seem to reinforce the assumption that the study of
mental health is the exclusive domain of the discipline of psychology. A glimpse of the history of the establishment of sociology as a scientific discipline, however, shows that mental health issues were part of the research agenda of this discipline’s founders. One example is the study of mental health by Émile Durkheim, the French sociologist, who researched extensively the mental conditions associated with suicide (Durkheim, 1951). Robert Merton, another sociologist, formulated the theory of strain to explain the source of stress or distress experienced by individuals in society (Merton, 1957). Studies of mental health did not stop with the classic era; in fact, several contemporary sociologists, such as Beck (2000), Bauman (2001), Bourdieu (1998), Cohen (2003), and Baudrillard (1994), to mention a few, have explored the issue of mental health of individuals in society. The work of such classical and contemporary sociologists demonstrates that research on mental health has been part of sociological tradition since its beginning. Furthermore, given that parental distress is real and very complex, it appears that its being exclusively studied from a psychological perspective is insufficient to allow for grasping all its aspects. In other words, a better understanding of the phenomenon of parental distress requires a multidisciplinary contribution, including sociology (Abidin, 1990).

Needs and Purposes

The need for this study stems from the two problems mentioned above: the relatively large percentage of Americans suffering from mental distress as well as its cost and the insufficient sociological analysis on the topic. Such a study is critical for obtaining a better understanding of the causes of mental distress, its impacts on individuals and society, and the processes by which both causes and consequences are interconnected. Also, a better understanding of mental distress will lead to design effective policies to help Americans
suffering from diverse mental problems. To more effectively approach these goals, the study will be exclusively focused on distress among mothers as opposed to the general American adult population. The concentration on a specific group within the American population will allow analysis of individuals who share several characteristics in common. Thus, the choice of the population of concern in the study is guided by the desire for reaching succinct and precise results that apply to mothers whose distress is related to their children’s delinquency. The focus on a specific group within the American population will also allow for the sort of specific results necessary in crafting policies useful to mothers instead of a one-size-fits-all approach that applies to all groups of which is often less effective.

Knowing factors related to maternal distress, one may be able to devise strategies to reduce the distress and, in so doing, to decrease the societal costs associated with the disorder. Accordingly, the second purpose of this study is to contribute to the sociological knowledge concerning this issue. The literature indicates that past research has looked primarily at parental stress or depression in connection with behavior problems (withdrawal, defiance, internalizing and/or externalizing behaviors) among children with either physical and/or mental disabilities (Baker, Blacher, Crnic, & Edelbrock, 2002; Baker et al., 2003; Fidler, Hodapp, & Dykens, 2000; Greenbaum & Auerbach, 1998; Hauser-Cram, Warfield, Shonkoff, & Krauss, 2000; Stores, Stores, Fellows, & Buckley, 1998). As one can see, the concept of a behavior problem is ambiguous compared to delinquent behavior which is more precise (Achenbach & McConaughy, 1997; Achenbach & Rescorla, 2007). Delinquent behavior is a subscale of externalizing behavior, which itself is part of behavior problem as internalizing behavior (Achenbach & McConaughy, 1997; Achenbach & Rescorla, 2007). In this regard, the present study specifically focuses on analyzing maternal distress and its relationship with children’s delinquency, not only
in the context of disability but more importantly within low-income families. Child delinquency in this study refers to rule breaking and is measured using 13 items of the Child Behavior Checklist (CBCL) (Achenbach & McConaughy, 1997). Maternal distress in the context of this study means “an unpleasant subjective state” of mothers (Mirowsky & Ross, 2003, p. 23). Maternal distress is measured by 18 items of Brief Symptoms Inventory (BSI) which is composed of two subscales: Anxiety scale and Depression scale (Derogatis, 2000; Durden, Hill, & Angel, 2007).
CHAPTER II

LITERATURE REVIEW

This chapter reviews relevant previous studies and presents the theory that guides the study. The first part of this chapter, labeled Literature Review, is subdivided into several sub-parts that describe the relationship between child behavior problems and parental stress. It shows that several factors such as child characteristics, mediating factors, and parental characteristics affect the distress levels of parents. The second part presents the theoretical framework that guides the explanation and the understanding of the results of the analysis. The last part bears the title Hypotheses and contains the assumptions made about the keys variables of this study.

Child Behavior Problems and Parental Stress

Almost all parents experience a certain level of distress associated with their parenting role. For some, the transition into parenthood is the triggering event leading to distress. For parents who are unprepared and unwilling to embrace their new status, the problem is compounded (Crnic & Acevedo, 1995; Mirowsky & Ross, 2003). For others, the distressful experience is specifically related to the caregiving activities for their children. For instance, activities such as bathing, feeding, or calming a child down when he/she is crying are overly demanding and distressing for some parents. Additionally, concerns among parents regarding their children’s growth, behavior, and physical and emotional health also constitute substantial sources of maternal distress (Ross & Blanc, 1998). Given the association between parenting and distress, no wonder parents dealing with behavior problems of their children have reported higher levels of distress (Duchovic et al., 2009; Dyson, 1997; Pelham & Lang, 2000; Podolski & Nigg, 2001; Quine & Pahl, 1985).
Hastings (2003) drew a similar conclusion when investigating behavioral problems among children with autism and their effects on parental stress. In his study, Hastings found that parental stress clearly stemmed not from the mental condition of these children (autism) but instead from the behavior problems that they exhibited. The merit of Hastings’s study arises not only from its documentation of the association between child behavior problems and parental stress but also from its ascertaining the direction of the correlation. More specifically, the study shows that child behavior problems cause stress to parents. Baker et al. (2003) also drew a similar conclusion in their study on behavior problems and parental stress in the cases of preschool children with and without development delays. The results of their analyses indicated a difference in the stress levels of parents. Parents of children with developmental delays reported higher stress levels than those whose children had no developmental problems. As in Hastings’s study, the study by Baker et al. also documented that parental stress was not caused by the developmental state of the children per se but by their behavior problems. These two studies and several others have demonstrated that children’s behavior problems are a strong predictor of elevated parental stress and have explained this association through the process of the mutual and escalating interaction effect between the two variables (Essex, Seltzer, & Krauss, 1999; Hastings, 2002; Weiss, 2002).

While most past studies on the topic have drawn similar conclusions as to the relationship between child behavior problems and parental stress, they have differed in terms of their conceptualization of the children’s behavior problems. Nevertheless, they showed similarities in their findings. Baker et al. (2003), for example, applied the new version of the Child Behavior Checklist scale. The scale’s 99 items are categorized into two major groups, including broadband scales (externalizing and internalizing items) and narrowband scales (such as emotional reaction,
depressed/anxiety, withdrawal, somatic, sleep problems, delinquent, attention and aggression). The study by Hastings (2003), on the other hand, measured children’s behavior problems using the Teacher Report version of the 93-item Developmental Behavior Checklist. It is important to note that the behavior problem is sometimes defined as a construct covering a limited number of concepts such as irritability, lethargy, and hyperactivity (Stores et al., 1998). Other times, the concept of hyperactivity is used interchangeably with behavior problems to cover an array of behavior difficulties such as restlessness, inattention, impulsivity, and noncompliance (Fischer, 1990). Defiance (Mash & Johnston, 1990), deviance, and conduct disorder (Lang, Pelham, Atkeson, & Murphy, 1999; Pelham & Lang, 2000) are also terms used to signify behavior problems.

Based on the review of the literature, it appears that most past studies rarely focused exclusively on delinquency as a behavior problem. Past studies have similarly rarely focused on maternal distress. One of the few studies investigating maternal distress was one conducted by Pelham and Lang (2000) showing the effects of having children with Attention Deficit Hyperactive Disorder (ADHD) on parents’ distress levels and alcohol consumption. In this study, maternal distress was used interchangeably with parental stress, a condition which includes anxiety and depression (Pelham et al., 1997).

In addition to Pelham and colleagues (1997; 2000), Duchovic et al. (2009) were also interested in maternal distress and its association with children’s behavior problems. However, as compared to Pelham and colleagues, Duchovic et al. (2009) clearly defined maternal distress and did not equate it with parental stress. They conceived of maternal distress as a negative psychic effect resulting from the disequilibrium between perceived demands and resources associated with parenting. They distinguished two types of distress, objective and subjective, where
subjective distress refers to negative feelings developed by parents toward the child with behavior problems, and objective distress refers to the conflict or disruption caused by the behavior of the child. This divergence in the conception of maternal distress did not prevent past studies from converging toward similar findings in terms of the relationship between child behavior problems and maternal distress. Thus, even though most past studies have shown that children’s behaviors affect their parents, not all parents react to them in the same way (Mash & Johnston, 1990).

In fact, parental stress is reported to be influenced by parents’ beliefs about the causes of a conduct problem (Mash & Johnston, 1990). The ideas that parents form about the origins of their children’s behavior problems affect their emotional reactions and their stress levels (Duchovic et al., 2009; Harrison & Sofronoff, 2002). Thus, when parents perceive the behavior problems of their children as intentional, that behavior is more likely to have a severe adverse effect on parental stress level than if it were not. Parents who perceive the behavior problems of their children as resulting from illness (disability), for instance, are more likely to have lower stress level generated from parenting than those who have a different perception of the origin of the behavior problems (Harrison & Sofronoff, 2002). Antisocial behavior, which is thought to be intentional, is considered to be controllable; consequently, its exhibition provokes negative emotions in parents (Mash & Johnston, 1990). Conversely, parents who perceive the behavior problems of their child as resulting from illness or disability are less likely to be stressed by those problems than parents who have a different perception of the origin of the problem. Mills and Rubin (1990) found that certain misbehaviors are more often considered controllable, such as aggressiveness. Because of the belief that aggressiveness is controllable, parental stress levels increase with its occurrence. To some extent, a child’s aggressiveness is perceived as defiance by
some parents and, as a result, provokes strong negative emotional reactions among parents. Unlike aggressiveness, hyperactivity is often viewed as beyond the control of the child and is therefore associated with less stress for parents (Mash & Johnston, 1990). Sometimes parents simply identify themselves as the cause of their children’s misconduct; therefore, they blame themselves for the behavior problems of their children. In this case, the stress of these parents increases not only because of the challenges of the behavior problems of their children, but also because of the self-condemnation and the sense of guilt (Harden, 2005).

It has been shown that the perception of personal control affects parental stress or depression levels (Crnic & Acevedo, 1995; Duchovic et al., 2009; Noppe, Noppe, & Hughes, 1991). Parents’ (especially fathers’) perception that they have little power or control over their children’s behavior contributes to increased maternal distress levels. Duchovic and colleagues (2009) investigated the relationship between the two variables and found that parents with higher levels of personal control are less distressed by their children’s internalizing behavior problems than those with lower levels. It is unknown whether that relationship holds in the case of externalizing behavior such as delinquency.

Other Factors of Parental Stress Associated with Child’s Challenging Behaviors

Maternal Characteristics

Mothers’ Gender

One important characteristic of mothers that modulates the relation of parental stress or depression to a child’s behavior problems is gender. Many studies have focused more on mothers than on fathers (Baker et al., 2003; Fischer, 1990; Haskett, Ahern, Ward, & Allaire, 2006). According to Haskett and colleagues (2006), the heavy focus on mothers can be attributed to two
major factors. First, most single parents are mothers, meaning that mothers are more likely to be dealing with child behaviors than fathers. Second, in most societies, mothers do more in the socialization process of a child, even in two-parent families (Haskett et al., 2006).

In general, most studies on parental stress and children’s behavior problems have reported higher rates of stress among mothers than fathers (Aneshensel, Frerichs, & Clark, 1981; Bird & Rieker, 1999; Campell, Converse, & Rogers, 1976; Essex et al., 1999; Glenn & McLanahan, 1981; Hastings, 2003; Moes, Koegle, Schreibman, & Loos, 1992). For Essex et al. (1999) the differential rate of stress among parents is linked to the fact that mothers are more heavily involved in everyday activities than are fathers and are consequently more exposed to the challenging behaviors of the child. It follows that mothers are more affected by those behaviors (Sloper, Knussen, Turner, & Cunningham, 1991) and as a result are more likely to have higher levels of depression than fathers. Like Essex et al. (1999), Hastings (2003) also argues that the elevated stress level among mothers as compared to fathers can be related to mothers’ disproportionate responsibility for care-taking activities in combination with the challenges presented by the behavioral disturbances of the child.

Four general theoretical explanations have been offered regarding the differential levels of stress among parents. First, according to gender-biased perspectives, the discrepancy is due to differences between men and women or fathers and mothers in seeking help and reporting symptoms (Bekker, 1996; Kessler, 1979; Kessler, Brown, & Broman, 1981; Piccinelli & Simon, 1997; Piccinelli & Wilkinson, 2000; Silverstein, 1999; Wilhelm & Parker, 1994). Working from this perspective, Olsson and Hwang (2001) explained the differential level of stress in terms of differences in the expression of emotions between women and men (Dohrenwend & Dohrenwend, 1976). More specifically, it was argued that women are more likely to freely
express their emotional problems than men because of cultural differences (Mirowsky & Ross, 2003). Having been socialized to be tough and competitive, men are less likely to report their emotional problems during interviews than women.

Second, the gendered-response theory shares some points in common with the first but is diametrically opposed to it in terms of its conclusion. This theory, like the first, postulates that there are gender differences in terms of expressing stress. Working from the premise of differential gender socialization, this line of argument supports the viewpoint that society encourages men to express their emotions, such as anger and frustration, more openly. From this perspective, the difference in depression levels between genders is related to societal influence which pressures women to internalize their frustration and anger. Thus, society allows men to vent their frustrations and in so doing liberates them from building up tensions which might potentially translate into mental stress. The lack of opportunity to vent their frustration and anger constitutes a contributor to the high stress levels among women as compared to men (Horwitz, 2002).

The third perspective applies factors such as socioeconomic status, social roles, and social support to account for the differences in stress levels (Bebbington, 1996; 1998; Bekker, 1996; Bird & Ricker, 1999; Kornstein, 1997; Piccinelli & Wilkinson, 2000). From this perspective, women or mothers have higher stress levels than fathers or men because of their generally lower socioeconomic status. Additionally, the multiple roles (wives, mothers, employees) held by women also heighten their stress levels. Not only do mothers experience conflicting and overloaded roles, but they also frequently lack a support system (Agrawal, Jacobson, Prescott, & Kendler, 2002).
The fourth perspective, related to the third, is built around the dominance-dependence argument. According to the supporters of this argument, the position of dominance of fathers at a societal as well as familial level can explain the gender differences in depression. Correspondingly, the dependent or subordinate position of women or mothers within the family and in society contributes to their higher stress levels (Horwitz, 2002).

In opposition to studies reporting differential levels of depression among mothers and fathers are those supporting the opposing argument of there being no difference (Heller, Hsieh, & Rowitz, 1997; Rousey, Best, & Blacher, 1992; Sloper et al., 1991; Trute, 1995). Pelham and colleagues (1997) too drew a similar conclusion about there being no difference in the level of distress between mothers and fathers in their research investigating the association between deviant child behavior, maternal distress, and alcohol consumption. In their experimental study, 60 parents were asked to interact with boys who were trained to behave either as normal children or as “deviant” ones with externalizing disorders (exhibiting attention-deficit hyperactivity, conduct problems, oppositional defiance). After the interaction, these parents were asked to drink alcohol. Parents who interacted with children acting in a deviant manner consumed more alcohol than those who interacted with boys acting normal. It is important to note that mothers consumed as much alcohol as fathers. Consequently, Pelham and colleagues (1997) concluded that child deviant behaviors increased the distress levels of mothers and fathers equally.

Other researchers arguing that there is no gender difference in terms of parental stress maintain that the differential distress level between mothers and fathers is socially constructed. They believe that differences in the way the interview questions have been asked, or in the conceptualization and operationalization of key concepts, have led to different results regarding both genders (Hubbard, 1990; Umberson & Williams, 1999).
The perceptions that parents have about their children’s behavior problems also vary according to their gender. For instance, mothers are more likely to evaluate aggressiveness negatively than are fathers (Bacon & Ashmore, 1985). The child’s gender is also found to influence parental perceptions of behavior problems. Because of the effect of socialization, parents, whether mothers or fathers, are more likely to be permissive of boys’ delinquency than of girls’ delinquency (Bacon & Ashmore, 1985; Parke & Slaby, 1983).

Mothers’ Age

While the influence of gender has been well-documented, another factor, age, has relatively not been. There is inconsistency in the literature with regard to the effect of age on parental stress. Most past studies either have shown that age of parents has no significant influence on maternal distress (Duchovic et al., 2009; Klose & Jacobi, 2004) or have simply ignored it (Helbig, Lampert, Klose, & Jacobi, 2006; Lang, Pelham, Atkeson, & Murphy, 1999; Pelham & Lang, 2000). However, there is evidence arising from community surveys showing an age effect (Horwitz, 2002; Mirowsky & Ross, 2003).

Mirowsky and Ross (2003), for example, argued that the mental health of individuals varies according to their ages. With regard to depression, they found the relationship between age and depression to be not linear but curvilinear. In other words, depression levels for most individuals is higher at a younger age (18-22 years) and thereafter decreases steadily all the way to middle-age (48-57 years). Afterward, individuals begin experiencing an increase in depression levels. Additionally, these researchers reported that certain types of mental problems are more prevalent in certain age groups. For instance, anxiety and anger are more predominant among younger people (around 30 years old) than among older people (50 and over).
The importance of age in mental problems was also shown in a study conducted by Glidden and Schoolcraft (2003) on depression among mothers of children with intellectual disabilities. The authors found that older mothers are less likely to be depressed compared to younger ones. One possible explanation of this difference in depression by age can be found in adaptational theory. The main assumption of this theory is that, as years pass, mothers or parents become accustomed to their children’s behavior problems and consequently adjust more easily to them (Heller et al., 1997; Townsend, Noelker, Deimling, & Bass, 1989). Apart from this process of acclimatization, this theory also stresses the notion of maturity. As parents age, they mature, which means that they have accumulated a great deal of experience and, as a result, are better equipped to deal with problems in an adequate manner.

Opposed to the adaptational theory explanation is the “Wear and Tear” theory, which postulates that parental stress levels increase over time. The main argument of this theory is that the adverse effects of the challenging behavior problems of the children wear parents down over time (Birenbaum, 1971; Johnson & Catalano, 1983).

Race of Mothers

As with age, discussions of the effect of parents’ race on their distress related to children’s behavior problems are scarce in the literature. However, the few studies which have documented the influence of race on maternal distress have a tendency to confirm a general pattern found in studies of mental health whereby minority ethnic groups are more at risk of mental problems than the majority group (Mirowsky & Ross, 2003). This vulnerability of minority groups to mental problems is due to their disadvantaged condition. Black parents, for example, are more likely to be less educated as compared to white parents (Evenson & Simon,
2005). Being less educated, black parents are limited to certain types of jobs, such as menial or unskilled work. The effects of such jobs include low incomes which can be linked to residences in poor neighborhoods (Caughy, Nettles, & O’Campo, 2008; Elliott, 2000; Xue, Leventhal, Brooks-Gunn, & Earls, 2005). The confounded influence of all these unfortunate conditions frequently increases parents’ stress levels (Pinderhughes, Bates, Dodge, Pettit, & Zelli, 2000).

Another aggravating situation for parents in minority groups is related to their marital status. For instance, the most common marital status among black parents is unmarried, which frequently coincides with the parenting status of single parenthood (Waite, 1995). Despite the fact that minority ethnic groups are exposed to more adverse conditions as compared to the majority, they often have a stronger support system. For instance, it has been found that black Americans are more likely than white Americans to receive greater social support from extended family (Duchovic et al, 2009; Leon, Sinha, Garvan, Bussing, Zina, Gary, & Mason, 2003; Puotiniemi, Kyngas, & Nikkonen, 2002). However, this social support advantage did not help in buffering the negative effect of stress associated with children’s behavior problems for black American parents (Duchovic et al, 2009).

Socioeconomic Status of Mothers

Another factor explaining the differential effects of children’s behavior problems on parental stress is related to the socioeconomic status (SES) of mothers (Hastings, 2002). SES appears to be a moderating factor of stress in parents (Horwitz, 2002; Mirowsky & Ross, 2003; Simon, 2000) at the high end of social status (Emerson, 2003). In other words, SES can have a buffering effect on parental stress in the case of a family who is not living in poverty.
In most social research, SES is defined in terms of education, income, employment, and/or types of work. Using the components education and income, Breslau, Staruch, and Mortimer (1982), in their study on psychological stress among mothers, found that the depression level of mothers decreases with an increase in income and education levels. Mirowsky and Ross (2003) explained this negative relationship between emotional well-being and SES in terms of the function of power and the sense of control. A higher level of education gives parents a sense of power. The knowledge accumulated through education gives parents the feeling of being masters of their lives. As the level of education increases, the attendant higher income also confers to parents a feeling of power and of being in control, which helps them adjust to stress. Even though high SES is associated with low distress levels, the inverse relationship also holds. In fact, parents with low SES experience higher stress levels (Hudson, 2005). This difference helps explain why certain social groups are more vulnerable than others.

For instance, most studies have stressed the advantages of majority groups as compared to minority groups in buffering the effect of stressful events. The link between being in a minority and vulnerability to stress can be explained through education, which is found to be the most influential component of SES (Mirowsky & Ross, 2003). One of the merits of education is to give individuals the ability to think in order to solve problems. Thus, the higher the level of education, the better the ability to think abstractly and find solutions to complex and difficult problems. Accordingly, parents from majority ethnic groups, who are more likely to have higher levels of education, are better equipped to deal with stress than their minority ethnic group counterparts (Dix, 1991; McLoyd, 1990). Because parents from majority ethnic groups are more likely to have higher levels of education, they are also able to make the effort to think through problems caused by the behavior problems of their children and find ways to deal with them.
This aptitude for thinking when faced with problems gives parents a sense of power which ultimately is linked to self-esteem, self-worth, and thus to good mental health (Andrews & Robinson, 1991; Horwitz, 2002; Schlosser, 1990).

Another no less important impact of a higher level of education is related to its attendant phenomenon, higher income. As parents from the majority racial/ethnic groups are more likely to have higher education, their income is also likely to be higher. Higher income has been shown to be associated with lower stress levels (Aneshensel & Sukoff, 1996; Ross, Reynolds, & Geis, 2000). No wonder parents from minority ethnic groups have tended to report more stress than parents from the majority (McLoyd, 1990; Myers & King, 1983). Black parents, for instance, experience higher levels of stress as compared to their white counterparts (Pinderhughes et al., 2000). Since African American parents have elevated stress levels, they may be more likely to use harsher disciplining methods, which in turn may have a tendency to perpetuate behavior problems in their children (Pinderhughes et al., 2000).

Education can also explain differences between fathers’ and mothers’ stress levels. Given their social context, fathers are more likely to have a higher level of education than mothers. As a result, fathers are also more likely to have better employment as compared to mothers and can explain in part why they report less stress than mothers.

Gender differences in stress in light of SES can be understood in terms of the type of employment as well. Even though gender roles are evolving and fathers are now involved in housework more than in the past, mothers as a group still tend to be responsible for the bulk of activities in the house (Arrighi & Maume, 2000; Baxter, 1997; Blair, 1993; Coltrane, 2000; Demo & Acock, 1993; Noonan, 2001; Seward, Yeatts, & Stanley-Stevens, 1996, Strong, DeVault, & Cohen, 2008). As compared to fathers, mothers spend more time in child caregiving,
culinary tasks, and housekeeping activities. Conversely, fathers spend more time in outside work, which is generally remunerated, as opposed to housework, which is generally unpaid. The difference between doing paid or unpaid work also helps explain the difference between the depression levels of mothers and fathers (Mirowsky & Ross, 2003). Thus, the financial rewards that fathers receive for their employment constitute a sort of protective measure against depression. Furthermore, working outside the house reduces the interaction time between parents and their children with behavior problems (Willoughby & Gliden, 1995; Roach, Orsmond, & Barratt, 1999). It follows then that fathers will tend to experience less stress associated with their children’s misconduct. Where fathers are less exposed to children’s behavior problems, mothers are more exposed. The caregiving activities and nurturing roles of mothers translate into an increase in interaction between them and their children with deviant behaviors. Having to deal with the challenges posed by the misbehavior of their children on a daily basis increases the likelihood of elevated depression levels among mothers (Crnic & Greenberg, 1990; Olsson & Hwang, 2001).

The impact of paid vs. unpaid work not only explains part of the differential levels of stress between fathers and mothers, but also affects depression levels among mothers. Even though mothers as a group report more distress than fathers, those with paid work experience fewer mental problems compared to those who have unpaid work or who are housewives (Helbig et al., 2006).

The difference between paid work and unpaid work is not the only characteristic of employment that determines differential levels of stress. Whether work is full-time or part-time also influences stress levels among parents. Full-time employment is associated with less stress than part-time (Kessler & McRae, 1982; Kessler, Turner, & House, 1989; Pearlin, Lieberman,
Menaghan, & Mullen, 1981). The beneficial effect of full-time employment is not exclusive to the American population only; it has been found in other societies as well. For example, Helbig and colleagues (2006), using a representative sample of the German population, reached a similar conclusion. They emphasized the mental health advantages of parents working full-time compared to those working part-time or being unemployed. The positive effect of full-time employment can be understood through the effect of higher incomes. Full-time jobs are not only relatively more secure than part-time jobs, but they also yield higher pay. Since higher income is linked to lower stress levels, it follows that parents with full-time employment score lower on stress inventories than those working part-time.

Even though most studies investigating the effect of employment on stress have demonstrated the benefits attached to employment compared to unemployment, the literature review presents some inconsistency when it comes to full-time vs. part-time work. Klose and Jacobi (2004) have shown that full-time work is not always synonymous with low risk of stress for parents. More specifically, they asserted that fathers and mothers do not equally benefit from the positive impact of full-time work, as reported by several researchers. In fact, they argued that only fathers with full-time employment reported lower levels of stress. For mothers, on the other hand, full-time employment was associated with a higher risk of depression (Brown & Bifulco, 1990). Another study which has questioned the impact of SES on parental stress is one by Olsson and Hwang (2001). In their study of parents of children with intellectual disabilities, Olsson and Hwang evaluated parental depression levels in Sweden and compared the results to findings in other countries such as the United States and the United Kingdom. They found that even though parents in Sweden did not report economic strain, they were almost as depressed as parents in the other two countries. Such a finding indicates that the protective effect associated with higher
income or wealth should be reevaluated. Thus, higher income does not necessarily always constitute a buffer against parental depression.

Religion

While the literature is quite scarce on several factors related to maternal distress originating from children’s behavior problems, none of the past studies has checked for the impact of religion. Not only is the variable of religion absent from studies examining the impact of children’s behavior problems on maternal distress, but also from the work of some prominent researchers in the area of mental health. Mirowsky and Ross (2003), who are well-known for their incontestable contributions to the sociology of mental health, did not elaborate on the possible link between religion and individuals’ well-being (see “Social causes of psychological distress, Mirowsky & Ross, 2003”). Another example is Horwitz (2002), who, even though well-known based on his multiple publications in sociology of mental illness, has also failed to examine the possible effect of religion on mental health in one of his best-known book, Creating Mental Illness.

This omission is quite surprising given that religion often involves intense emotion, which is of major interest in the subfield of mental illness (Roberts, 2004). Conversely to the literature on maternal distress, studies on caregiving and/or coping have underlined the importance of religion as a coping mechanism (Schwab, 1990). Moreover, studies on caregiving and coping and classical sociology offer examples of examining the influence of religion on individuals’ behaviors. Marx, for instance, showed how the bourgeoisie used religion to pacify the proletariat. Religion from the Marxist perspective is more than an ideology of the dominant class. In addition to maintaining the advantages of the bourgeoisie (haves), religion also offers
the proletariat (have-nots) ways to adjust to their distress mostly caused by economic strain. Thus, explaining their poor condition as divinely ordained, according to Marx, helps the have-nots cope with the distress resulting from their disadvantaged economic situation (Roberts, 2004; Yinger, 1970). While the Marxist view of religion and its link with mental health is often overlooked, that of Durkheim (1951) is unequivocally clear. Durkheim is another classical sociology scholar who wrote extensively about suicide. Durkheim found that religion influenced the rate of suicide; specifically that suicide was more prevalent among Protestants than Catholics. According to him, the differential suicide rates could be attributed to the differential degree of social integration in both congregations. In other words, Protestants showed higher suicide rates than Catholics because of their low social cohesion. In his view, Catholicism, whether via its theology or culture, promoted more social cohesion than Protestantism.

In more recent years, Johnstone (2001) has also stressed the link between religion and mental health. For him, one of the functions of religion is to help individuals navigate crises. Religion offers comfort and reassurance to people experiencing emotional crises. In times of death, bereavement, uncertainty, or disappointment, many people turn toward religion for answers and explanations. Another contemporary researcher who emphasizes the place of religion in individuals’ well-being is Roberts (2004). According to Roberts (2004), the most important point is not whether the answers and explanations provided by religion are true, but whether and how it makes people feel better. Religion, according to Roberts, helps individuals experiencing sufferings, injustices, or death cope with these unfortunate events by providing a system of meanings. These meanings make these distressful events less burdensome and more bearable. Apart from making life more meaningful, religion gives believers a sense of identity. In the modern world, where uncertainty and the precariousness of life constitute a source of distress
for individuals, gaining a sense of identity is crucial for individuals’ development and mental health.

These sociological studies suggesting a link between religion and mental health are compelling and yet past research failed, for the most part, to investigate its possible influence on parental stress related to their children’s behavior problems. Based on the suggested relationship between religion and mental problems, this present research project will investigate its possible influence on maternal distress. Given the evidence as to the effect of religion on individuals’ well-being, it is possible that parents who practice certain forms of religion will be less prone to distress originating from their children’s delinquent behaviors, or that maternal distress may vary according to the frequency of religious service attendance.

Marital Relations

The effect of parents’ marital status on distress levels related to parenting is also not well-documented in the literature. As a result, this section on marital status will examine the findings in the general area of mental health. Findings in community surveys have indicated that parents who are married have a lesser risk of mental health problems as compared to single parents (Mirowsky & Ross, 2003). Several explanations have been provided to account for the disadvantages associated with single parenting such as economic strain, unemployment, and insufficient social support.

At the financial level, it was shown that married couples were better off than single parents, explaining why single parents were more likely to experience economic hardship than two-parent families (Brown & Moran, 1997; Lipman, MacMillan, & Boyle, 2001). This economic hardship common among single parents likely results from their associated lower
education level, which in turn is related to lower employment status (Wang, 2004). Having lower education levels limits single parents’ employment opportunities. Moreover, single parents are often confronted with being torn between caregiving activities for their child(ren) and their work schedules. Partly as a result of these conflicting schedules, most single parents are less likely to have full-time jobs. Working part-time instead of full-time has been found to be associated with stress (Dooley, Prause, & Ham-Rowbottom, 2000). Single parents also have a tendency to have low social support (Pinderhughes et al., 2000). Whereas parents who are married can rely on each other to deal with the challenging tasks of child rearing, single parents can generally count only on themselves. According to some researchers, the availability of a spouse to share problems with explains the difference between the stress levels of single parents and married ones (Ross, 1995). Knowing that you have a readily available support system that can help when needed is reassuring and gives married parents a reason not to worry too much. The absence of this immediate social support in addition to the economic hardship stemming from lower education levels and unemployment explains the high vulnerability of single mothers to stress as compared to married parents (Helbig et al., 2006; Umberson & Williams, 1999). This elevated stress level of single parents accounts for their unhealthy lifestyle behaviors, including smoking and alcohol abuse (Baker & North, 1999; Pelham et al., 1997; Shouls, Whitehead, Burstrom, & Diderichsen, 1999).

Not all the studies have consensus toward an association between marital status and mental health benefits. Umberson and Williams (1999) argued that some of these findings might be the result of a miscategorization and miscomparison. They specifically point out that sometimes studies compare married parents with unmarried parents, a category which includes divorced, separated, widowed, or never married parents. Based on this problem related to the
conceptualization of both concepts (married and unmarried), they argue that the difference found between single parents’ and married parents’ levels of stress might be spurious (Evenson & Simon, 2005).

Child Characteristics

*Gender*

Parental stress is affected by the gender of a child. Studies which control for the gender of the child, have overwhelming indications that parents are more stressed with boys than girls (Crnic & Greenberg, 1990; Turner & Sloper, 1996). Emerson (2003) has shown, for instance, that maternal distress levels vary with the child’s gender. Stores and colleagues (1998) have reported similar findings pointing out that, as compared to girls, boys exhibit more behavior problems, which is a contributing factor of their mothers’ high depression levels.

This association between parental stress and a child’s gender seems to be a cross-cultural phenomenon. In fact, Molteno, Finchilescu, and Dawes (2001) found the same results when studying children and their parents in South Africa. The consistency in the results of cross-national studies has led some researchers to the conclusion that boys are more likely to increase their parents’ levels stress. This conclusion likely explains why some studies have focused on boys only when investigating parental stress such as the studies by Lang et al. (1999) and Pelham et al. (1997).

*Age of the Child*

There is evidence in the literature suggesting that the age of the child influences the stress level of parents. In general, studies have concluded that parental stress levels decrease as the age
of their child increases (Stores et al., 1998). In other words, having younger children with behavior problems is associated with a higher level of distress in parents than having older children (Hastings, 2002; Umberson & Williams, 1999). Some studies have investigated this correlation in a more precise manner by categorizing ages of children into groups, such as below 9 years, between 9 and 13 years, and 13 and over (Einfeld & Tongue, 1996). Molteno et al. (2001) also applied that idea but with different cut-off points. In their case, they used only two categories, children below 14 and above 14. Working from this subdivision, they reported that parents of children above 14 years of age showed lower levels of stress compared to those whose children were younger than 14. One of the problems with this study is that it failed to elaborate on the reasons behind that choice of a cut-off point.

The correlation between the age of a child and parental stress can be explained through the concept of developmental stages. Using this theory, Crnic and Acevedo (1995) showed the adverse impact on parents of the inattentive, overactive, and defiant behavior of the “terrible twos.” Fortunately, most children abandon these challenging behaviors as they age. Mills & Rubin (1990) also reported that parents believe that the behavior problems of their children are age-related. More specifically, parents tend to have the viewpoint that their children’s misconduct is temporary and that they will be less prone to adopt problematic behaviors as years pass. Under such a belief, parents often have a proclivity to see more deviant behaviors in their younger children than their older ones and experience more distress as a result.

A different way of explaining the relationship between parental stress and the child’s age can be found in the caregiving activities. Caregiving activities differ with the age of the child. Most of the time, parents of a young child have more caregiving work to do than those of an older child. As childcare activities decrease with the child’s age, parents are less likely to
experience high levels of stress associated with child-rearing. As children age and become more independent in terms of doing things for themselves, such as going to the toilet, feeding themselves, or cleaning up their own messes, parents have less to worry about and consequently perceive and report less stress (Kandel, Davies, & Raveis, 1985; Umberson & Gove, 1989). For Mash and Johnston (1983), the behavior problems of younger children are associated with higher depression levels in mothers. They clarified their finding by specifying that mothers of younger children (around 5 years) reported more depression than those of older children (around 8 years of age). Conversely to all these studies, Helbig et al. (2006) found that the age of the child is negligible as a variable in parental levels of stress.

Mediating Factors

*Coping*

When experiencing distressful events, people develop or activate their coping mechanisms (George, 1980; Turner, 1999; Turner, Wheaton, & Lloyd, 1995). Coping mechanisms refer to a repertoire of personal options individuals have to help prevent, avoid, or control distress (Wiess & Lonnquist, 2009). There are generally two types of coping mechanisms: problem-focused and emotion-focused (Gilbar & Zusman, 2007; Lazarus & Folkman, 1984). A problem-focused coping mechanism refers to cases in which individuals take active measures to deal with the distress (Grabiak, Bender, & Puskar, 2007; Lazarus, 1993). The emotion-focused technique, on the other hand, refers to cases in which individuals adopt a passive attitude toward distressful situations (Grabiak et al., 2007). Another and perhaps clearer way of distinguishing between these two types of coping mechanisms has been offered by Lazarus and Folkman (1984). From his perspective, there is a relationship between a specific
type of coping and its place or function in the stress process. In general, emotion-focused coping is mostly used in an attempt to regulate the emotion resulting from the distress. The problem-focused coping, on the other hand, is an attempt to manage the problem causing the distressful emotion. Thus, for Lazarus and Folkman (1984), the time order of the coping mechanism relative to the distress outcome and its cause constitutes the difference between the emotion-focused and the problem-focused type of coping strategies.

Additionally, the individual’s coping is also affected by his or her sense of mastery or control. The notion of mastery is related to the idea of being in control of the situations that affect one’s life. As a function of the perceived degree of control, the individuals might incline more toward one type of coping than another. More specifically, individuals who feel that they have more control over a distressful event have a tendency to use problem-focused coping as compared to those who perceive themselves as having less control (Lazarus & Folkman, 1984). In other words, individuals tend to use emotion-focused coping resources when they deem their distressful situation less controllable and use problem-focused coping when the situation is considered to be more controllable (Silver & Wortman, 1980). Not only does the degree of mastery determine coping strategies, but also and most importantly, it affects the individual’s level of distress. The feeling of being in control of the forces that influence one’s life is associated with less stress compared to the feeling of a lack of control (Pearlin et al., 1981).

Apart from the notion of mastery or control, self-esteem is another dimension of self which affects individuals’ distress levels. Self-esteem refers to the idea that individuals have concerning their self-worth and has been shown to be related to distress (Kendler, Gardner, & Prescott, 1998; Lazarus & Folkman, 1984; Mirowsky & Ross, 2003; Mash & Johnston, 1983; Pearlin et al., 1981; Pearlin, 1999; Rosenfield, 1999; Weiss & Lonnquist, 2009). As in the case
of control, high self-esteem is associated with less distress whereas low self-esteem is correlated to a higher risk of distress. These concepts applied to the case of mothers whose children exhibit delinquent behaviors can possibly lead to similar findings. For example, in accordance with the notion of control and mastery, it is conceivable that mothers who perceive the delinquent behaviors of their children as being under their control might experience less distress than those who think of these behaviors as outside their control. It is also possible that parents with high self-esteem might experience less maternal distress than those with low self-esteem.

Support System

In addition to these coping mechanisms related to the process of socialization, individuals can draw on social support when experiencing distress. While a coping mechanism constitutes personal attempts, support systems are social resources from the individuals’ network on which they can rely on in time of distress (Pearlin & Aneshensel, 1986). Often, individuals call upon their support systems only in a case where their own coping strategies have failed to effectively fight the distressful situation. Jacobson (1986) distinguishes three types of social support: emotional, cognitive, and material. Emotional support refers to feelings of comfort, respect, love, caring, and concern. Cognitive support is related to information, knowledge, and advice. Material support includes products and services to assist in dealing with specific problems. Duchovic et al. (2009), on the other hand, conceived two types of social support: tangible and intangible. Tangible support includes respite, loans, gifts, and information. Intangible support refers to emotional support and empathy. Working from these conceptualizations of social support, Duchovic et al. (2009) found that parental support systems did not help them in mediating or moderating the effects of distress associated with their children’s behavior.
problems. However, they cautioned against this result being taken to indicate there being no influence of social support on maternal distress with reference to the small number of parents who reported on their support system.

In any case, this finding of Duchovic et al. (2009) is in sharp contrast with the general pattern of studies on social support. Frequently, most studies documenting the influence of social support on parental stress have concluded the existence of a correlation between them. For example, Hastings (2003) argues that the slight difference between the stress levels of mothers and fathers is probably due to social support. Looking at the stress levels among parents of children with behavior problems, Hastings noticed that mothers’ stress, even though higher, is unusually close to the levels of fathers’ stress. This lower level of the stress mothers, according to Hastings, is the result of the supporting role that grandparents might have played in assisting mothers. One conclusion of this study is that social support is important and can make a difference in dealing with stressful situations. The study by Pelham et al. (1997) also depicted the crucial effect of social support on distress by showing the cost of its insufficiency. As an example, single mothers demonstrated elevated distress levels as indicated by their increased alcohol consumption because they were likely to have less adequate social support systems. Among single mothers, those from an African American racial background were found to be the most at risk for higher levels of distress compared to those who were European Americans (Pinderhughes et al., 2000).

Another example of the conceptualization of social support can be found in the research of Saloviita, Itälinna and Leinonen (2003). Like Duchovic et al. (2009) they identified two types of support systems. However, and unlike them, Saloviita and colleagues used the notions of formal and informal social support instead of the tangible and intangible. Formal social support
is measured in terms of support received from daycare personnel, doctors, and social workers. Informal support, on the other hand, is defined in terms of support received from family members. Based on this conceptual perspective, the authors found that informal social support is the most effective type of support system in reducing mothers’ levels of stress. Among fathers, they found that spousal support was the most important and successful in ameliorating stress. It follows then that informal social support has been found to be more effective than formal when it comes to parental stress (Duvdevany & Abboud, 2003).

Mirowsky and Ross (2003) used the concepts of perceived emotional support and actual emotional support. According to them and several other researchers, the former was the most important in effectively fighting stress (Helgeson, 2003; Helgeson & Cohen, 1996; Kinsinger, McGregor, & Bowen, 2009). Knowing that there is someone in one’s social network to talk to when things get tough is comforting for the individuals and is associated with less stress. Perceived social support, more than actual social support, explained most of the difference reported between the stress levels of married parents and single ones. The perception of readily available back-up is apparently sufficient to substantially decrease the stress of married parents or two-parent households. Thus, the absence of this perceived social support accounted for the high levels of stress among unmarried parents or single parents. When it comes to actual social support, it was shown to have no beneficial effect on individuals’ well-being. In fact, actual social support was associated with higher stress levels for some individuals. More precisely, disclosing the source of the problem to the members of a social network and seeking their advice was shown to be distressful for individuals (Mirowsky & Ross, 2003).

An increasing number of studies on social support are adding to the literature through their innovative concepts of positive and negative social support (Barbee, Derlega, Sherburne, &
Grimshaw, 1998; Dalgard, Bjork, & Tambs, 1995; Newsom, Mahan, & Rook, 2008; Reinhardt, 2001b; Okun & Lockwood, 2003). In a sense, social support can have a deleterious effect on individuals’ mental health (Finch, Okun, Pool, & Ruehlman, 1999; Reinhardt, 2001a; Rook, 1984). Such a conceptualization of social concept constitutes a revolutionary thought because it challenges the wide-spread assumption of the buffering effect of social support on stress. Findings of these studies are leaning toward the conclusion according to which positive social support compared to negative support is beneficial to the individual mental health (Bertera, 2005; Finch, 1998; Ha, 2009).

**Theoretical Background**

The study uses the postmodern theoretical perspective to explain the impacts of postmodern factors on the relationship between maternal distress and children delinquency. One of the most important notions in the theory on postmodernity is instability. According to Bauman (2001a), modernity and postmodernity constitute two diametrically opposed epochs. The dominant characteristic of the period of modernity is stability, whereas postmodernity is full of instability. This notion of instability refers to the unpredictability of events in the postmodern world. Except in some rare cases, it is practically difficult for most individuals to calculate the probabilities of their actions because “there is a fifty-fifty chance of any event happening” (Bauman, 2001a, p. 31). This situation in which it is difficult to predict with precision the occurrences of events is the result of the absence of order, which Bauman designates as chaos.

The chaotic status of the epoch of postmodernity is nothing but a reflection of what is going on at the cultural level. For Bauman (2001a), culture plays a regulatory role in society. It is through culture that society is organized. Culture helps in classifying the composing parts of
society into similar and dissimilar categories. Thus, culture maintains order in society. If culture determines order, which is necessary to the calculation of the probable consequences of individuals’ actions, then it constitutes a key element of stability in society. As such, the absence of order and stability is an indication of “cultural crisis” (Bauman, 2001a, p. 32).

One of the consequences of the absence of order is “flexibility.” The concept of flexibility from Bauman’s (2001a) perspective is multidimensional and is related to the notions of deregulation, freedom, and insecurity. The high rates of unemployment in postmodern societies constitute an excellent illustration of this notion of flexibility. According to Bauman (2001a), Beck (2000), and Bourdieu (1998), there are more part-time jobs compared to full-time in the postmodernity period. This change in employment constitutes a deregulation compared to the period of modernity. Before, individual workers, more often than not, had a guarantee of being employed by the same company until retirement. However, this practice of a life contract with an employer is relegated to the past. In the present day, the most common practice is the short-term contract.

This flexibility in work contracts underscores the freedom of both parties. This means that employers have the freedom to fire workers once they judge them unprofitable. Employees are also free to leave their companies since they do not have a life-long commitment.

Even though freedom is highly cherished in postmodern societies, it comes with a string attached (Giddens, 1990; 1991). The freedom gained is a trade-off for security (Bauman, 2001a, p. 42). In terms of employment, for example, despite individuals being free from long-term commitment to employers, they are more than ever before faced with job insecurity (Giddens, 1990; 1991). Because of the absence of long contracts, employees have no guarantee of having work at all times. There is always a “fifty-fifty” chance that they can be terminated from
employment at any time and suffer the subsequent economic hardship. As with employees, employers can also suffer economically from this freedom, since there is a “fifty-fifty” chance that the former will quit their jobs. This general insecurity that reigns in postmodernity is also described as a precarious situation (Bauman, 2001a; Beck, 2000; Bourdieu, 1998).

Bourdieu (1998) makes similar remarks regarding employment and notices changes within the employment sector as well. According to him, these changes are the derivatives of the phenomena of globalization and neo-liberalism. An example of change within employment is the “flexible working” model (Bourdieu, 1998, p. 34). This “flexible working” or “flexploitation” (Bourdieu, 1998, p. 85) introduces odd schedules into employment. Whereas employees used to work weekdays from 8 a.m. to 5 p.m., now they can work night shifts, weekend shifts, and several irregular hours. While this irregularity in work schedules might be good for some workers, it is, in fact, accompanied with negative consequences, one of which is job insecurity (Bourdieu, 1998). The introduction of odd shifts means an increase in the number of employees working on a part-time basis. The increase of part-timers results in the decrease of full-timers. Another condition associated with part-time employment is the absence of benefits (health insurance and retirement pensions) because of the short term contracts between employees and employers.

The increase of part-time employment is contributing to job insecurity (Habermas, 1981). The insecurity within employment is not only commonplace among part-timers but full-timers as well (Bourdieu, 1998). For full-time employees, their security is constantly under threat because of the rise of the unemployment rate and the large number of part-timers who are looking to get full-time positions. Without job security, individuals are left with uncertain futures. The loss of the possibility of anticipating the future leads to the loss of hope and the feeling of despair which
are the major sources of “social disease” in society (Bourdieu, 1998, p. 45), including mental health problems. Clearly, the increasing rate of mental problems (anxiety, stress, depression, delinquency, suicide, and alcoholism) is related to the uncertainty, precariousness, instability, and irregularity resulting from flexibility within the society and the employment sectors in particular.

The precariousness of the present time represents the root cause of individuals’ frustration and irritation and ultimately explains the proliferation of mental distress in society. Bauman (2001a) traces the source of the frustration and irritation to insecurity and the confusion that comes with postmodernity. The ever-changing nature of realities in present-day societies is vexing for individuals and constitutes a constant threat to their mental health. The elusive character of social realities is distressful for individuals because it is constantly throwing them off balance.

For Baudrillard (1994) the disorientating character of the postmodernity epoch brought about the disappearing of history. The vanishing of history means the destabilization of our vision of the concept of time but also of space. Before, in the modern era, “the shortest path between two points is the straight line…” (Baudrillard, 1994, p. 10). This assumption, unfortunately, no longer applies to the realities of the society of “fin de siècle” dominated by non-Euclidean systems. In non-Euclidean systems, space and time are not linear but curvilinear. The end of linearity corresponds to the end of stability or order. Simply put, the period of postmodernity is characterized by chaos. The advent of chaos constitutes the end of prediction; consequently, “there is no longer a future” (Baudrillard, 1994, p. 11). With the absence of the future, there will never be a past or history. The disappearing of the past and the future leads to catastrophic crisis in individuals’ references and identity as well. The destabilization within the
system of references and identity of the individuals explains the proliferation of “psychical madness” (Baudrillard, 1994, p. 109).

The results of this destabilization are present in all the sectors of postmodern societies. One of the consequences of the fluidity of social reality is that nothing is sure anymore. Community of residence is also affected by the sweeping effects of the period of postmodernity. In fact, community and by extension neighborhood do not have the same meaning as they have had in the past (Bauman, 1992; 2001a). Before, neighborhood was a safe, warm, pleasant place where neighbors knew each other (Bauman, 1992; 2001a). These attributes have been replaced by several problems, such as insecurity and lack of freedom (Bauman, 2001b). The advent of these problems in the neighborhood is connected to the most prevailing idea of our current era: flexibility, a concept associated with other notions such as deregulation, uncertainty, chaos, and disorder. With flexibility comes insecurity (Bauman, 2001a; 2001b). As a result of this generalized insecurity, people living in the same neighborhood are now “neighbors strangers” (Bauman, 1992; 2001a). This feeling of living among strangers urges individuals to be defensive at all times. Not knowing who is who forces individuals to be over-cautious, to be suspicious of neighbors, and to interact less (Bauman, 1992). The proliferation of strangers in the neighborhood, furthermore, forces the individuals to not trust anybody, to not ask for help in time of need, and to barricade themselves from the outside world, and ultimately to be withdrawn (Bauman, 1992; 2001a). As a result, individuals have lost their points of reference along with their identity. The presence of strangers in the neighborhood, which is linked to the notion of insecurity, constitutes an illustration of the destabilizing nature of postmodernity. The conjugated or the separated effect of the neighborhood, loss of point of identity, and instability in
the job market inexorably leads to a “malady … inside the human psyche” or mental problems (Bauman, 2001a, p. 43).

Among the factors associated with mental health problems of this “fin de siècle,” the identity syndrome is prominent (Baudrillard, 1994). The identity crisis is related to the schizophrenic nature of the present epoch of postmodernity. The delirium and the dizziness associated with the feeling of being lost are other conditions linked to the loss of identity which in turn is due to chaos and “the vertiginous forms of disorder…” of the period of postmodernity (Baudrillard, 1994, p. 113).

Working from the postmodern perspective, it is possible to explain the distress of mothers who are dealing with the delinquency of their children in three conceivable ways. First, from the premise of the disorientation of the postmodern society, one can postulate that mothers who are distressed as result of the delinquent behavior of their children will experience even greater levels of distress when confronted with employment problems. That is, mothers of delinquent children are more likely to experience higher levels of distress if they are unemployed or have part-time jobs.

Second, given that postmodernity is also associated with loss of identity as a reference point, it is that religions connections might ease possible to see the distress level of mothers who have delinquent children. For example, from the view that religion gives individuals a sense of meaning and identity, it is possible that the frequency of religious services attendance can influence the distress level of mothers with delinquent children. Third, using the argument of insecurity, it is also possible to link neighborhood problems with the distress of mothers. For instance, one can conceive that neighborhood disorders can heighten the distress level of mothers who are dealing with the delinquent behavior of their children.
Taken together, the preceding review of the literature and theoretical background gives rise to the following hypotheses.

Hypotheses

Hypothesis 1: Children’s delinquency will have a positive effect on maternal distress.

Hypothesis 2: The association between children’s delinquency and maternal distress will be moderated by factors such as parental employment, attendance at religious service, and level of neighborhood disorder. Specifically, the positive association between children’s delinquency and maternal distress will be stronger when mother is unemployed, attends religious services infrequently, and lives in a disordered neighborhood.
CHAPTER III

METHODS

This third chapter provides an overview regarding the data of the study and has four sections. The first presents the information on the source of the sample for this research project. The second section on measurement gives an insight into the way key variables were conceptualized and operationalized. The third section shows the different procedures performed for data cleaning. The last section on analytical strategy deals with the statistical procedures and techniques used to analyze the data and test the hypotheses of the study.

Data Source

In order to test the above hypotheses, this study uses data from Wave 3 of the Welfare, Children and Families project. The Welfare, Children, and Families project is a longitudinal study which investigates families residing in low-income neighborhoods in three U.S. cities, namely Boston, Chicago, and San Antonio. The first wave was conducted in 1999 and was based on a random stratified sample of approximately 2,400 households with children from these three cities. The response rate was 75%. The data for the second wave was collected in 2001. The third wave, which is the main focus of this study, was conducted between February 2005 and January 2006.

This study was focused on the third wave for two main reasons. First, the third wave is relatively newer than the two previous waves. Second, the ages of the children seem more adequate for investigating children’s delinquency in Wave 3 than the first two waves. The ages of the focal children in the third wave were between 5 to 18 years. Data from the third wave were collected using a combination of computer-assisted personal interviews (CAPI), computer-
assisted telephone interviews (CATI), face-to-face interviews, and telephone interviews, with a sample size of 1,835 parents. The response rate for Wave 3 was 80%. The drop in sample size from the first wave to the third was due to the fact the study only included mothers who were still caring for their children. That is, empty-nest households or mothers who were no longer providing care for their children, but who were initially interviewed in the first two waves were excluded from the third wave.

Data Screening

The initial sample size for the third wave was 1835. However after the data cleaning process, the final sample size was reduced to 1355. Several steps were taken to reach the final sample size. First, a filter command (in SPSS 20) was applied to keep very small categories of the variables marital status and race from being used in the analyses. Using this procedure helped to block categories such as Non-Hispanic-Asian \((n = 1)\), Non-Hispanic Indian \((n = 8)\), Non-Hispanic other races \((n = 7)\), and “can’t determine which race I am” \((n = 20)\) of the variable race from entering the analyses. The technique was also used to block the category male \((n = 19)\) of the variable gender of parents from the analyses. Thus, the sample consists of only mothers who are [list race/ethnicities included]. Second, using the filtering procedure, listwise deletion of cases due to missing values for variables included in the analysis was performed. This second step reduced the data to 1405. Third, the data were checked for potential multivariate outliers using the Mahalanobis distance technique. Using the critical chi-square of \(\chi^2 = 51.179, df = 24\), at the .001 level, 50 potential multivariate outliers were identified, which were, later on, deleted, leaving the final sample size of the study at 1355 parents, all of whom were mothers.
However, before the deletion of these 50 outliers, four regression models (Table A.1 in an appendix) were estimated and the results were compared to the final four regression models (Table 2) used for analyses in this study. A comparison of the coefficients and the R²s in the two set of four regression models indicates that they are similar; therefore, there is evidence suggesting that the deletion of outliers did not drastically affect the results of the analyses of this study.

Measurement

Dependent Variable

Maternal distress in the study was measured using the 18 items of the Brief Symptom Inventory (BSI-18) constructed by Derogatis (2000). These 18 items represent different degrees and dimensions of maternal distress as listed in Table A.2. Response categories to the items of the index range from 1 to 5 where 1 = not at all, 2 = a little bit, 3 moderately, 4 = quite a bit, and 5 = extremely. Maternal distress index computation was based on the 80% rule (Fox-Wasylyshyn & El-Masri, 2005). That is, the index was computed only if at least 80% of the items have valid responses. This rule applied to maternal distress in this study indicates that the index is computed only if at least 15 out the 18 items have valid responses. The index was constructed by using the mean response of the items.

Factor analysis applied to the 18 items suggests the factorability of maternal distress index. Principle component analysis (PCA) was used to estimate the proportion of variance in the items. PCA was used because it “is a straightforward, easily understood, and commonly used extraction technique in factor analysis” (Pett, Lackey, & Sullivan, 2003, p. 102). The examination of the initial eigenvalues showed that a one-factor solution explained about 52% of
the total variance. That is, 52% of the variance in the 18 items of maternal distress index is explained by one factor, Factor 1. Factor 2 explained only about 7% of the total variance. A comparison between the two factors indicated that Factor 1 accounted for considerably more variance than Factor 2. The factor loading matrix also confirmed a one-factor solution as all the 18 items of the index load strongly on Factor 1 (their loadings range between .602 and .805).

In addition to factor analysis, inter-items correlation matrix was conducted (Table A.2). The results suggest that the items of maternal distress index are positively associated with each other. The correlations range from weak (.23) to moderate (.69). The weakest correlation coefficient of .23 represents the association between distressed/bothered by suicidal thoughts and distressed/bothered by nausea. The highest coefficient, which is .69, represents the correlation between distressed/bothered by feeling fearful and distressed/bothered by feeling scared. Additionally, Table A.2 reveals that, on average, mothers are more likely to report that they were not at all distressed/bothered by feeling blue ($M = 1.58$, $SD = .93$), while they are less likely to indicate that they were not at all distressed/bothered by suicidal thoughts ($M = 1.09$, $SD = .46$).

A test of internal consistency was performed for maternal distress index using Cronbach’s coefficient alpha. This coefficient was used because it is the most appropriate approach to estimate the consistency for items scored on a continuum as those of maternal distress (Cronbach, 1984). Cronbach’s alpha for maternal distress in this study is .94 which is an indication of a strong reliability.

Independent Variable

Children’s delinquency in this study was based on 13 items of the Delinquency subscale of Child Behavior Checklist (CBCL) formulated by Achenbach and McConaughy (1997). These
items represent the different dimensions of delinquency among children as listed in Table A.3. Responses to these items were given on a 3-point Likert scale coded in the following manner: 1 = not true, 2 = somewhat or sometimes true, and 3 = very true or often true. Children’s delinquency index was computed using the 80% rule. That is, the index was computed if at least 80% of the items have valid responses. This rule applied to children’s delinquency indicated that the index is computed only if at least 11 out the 13 items have valid responses. The index was constructed by using the mean response of the items.

The reliability test for the items of children’s delinquency index was performed using Cronbach’s coefficient alpha. The result of the test yields a coefficient of .83 which suggests a relatively strong internal consistency. This relatively high alpha indicates that the items entered in the computation of children’s delinquency index are strongly reliable.

Factorial analysis applied to the 13 items suggested the factorability of children’s delinquency index. The examination of the initial eigenvalues, using PCA method, showed that two factors explained about 44% of the total variance. That is, 44% of the variance in the 13 items of children’s delinquency is explained by Factor 1 and Factor 2. Factor 1 explained about 34% of the total variance, while Factor 2 accounted for about 10%. A comparison between the two factors indicated that Factor 1 explained considerably more variance than Factor 2; consequently one factor is the solution. The results of the factor loading matrix also confirmed a one-factor solution as most items (10 out 13 items) loaded strongly on Factor 1 (their loadings range between .534 and .724).

Inter-items correlation matrix of children’s delinquency index was conducted (Table A.3) and suggests that the items of the index are positively associated with each other. The strength of the correlations ranges from very weak (.02) to moderate (.59). The weakest
correlation coefficient of .02 represents the association between child sets fires and child drinks alcohol without parental approval. The highest coefficient is .59 and represents the correlation between child breaking rules and child disobedient at home. A further examination of Table A.3 shows that, on average, mothers are more likely to report that the item “child breaking rule” was not true for their children ($M = 1.51$, $SD = .62$), while they are less likely to indicate that the item “child sets fires” was not true for their children ($M = 1.02$, $SD = .16$).

Control Variables

*Age of mother.* This variable was measured in years.

*Race.* Race was measured with two dummy variables coded as follows: Black (= 1; else = 0) and Hispanic (= 1; else = 0) with Non-Hispanic White as the reference category.

*Education.* This variable was coded as follows: 1. 8th grade and lower; 2. 9th - 12th grades; 3. GED; 4. High school diploma; 5. Some technical school; 6. RN diploma; 7. Some college; and 8. Bachelor and plus.

*Income.* Income was measured by asking respondents to indicate their total household income from all sources in the month preceding the interview in a dollar amount.

*Employment status.* Employment status was measured by asking respondents whether or not they had worked in the last 11 months and was coded (1 = employed; 0 = not employed).

*Religious services attendance.* This religion variable was dummy coded as 0 = never to a few times, 1 = one or two times per month to more than once a week.

*Marital status.* Marital status in this study was coded (1 = married; 0 = else).

*Positive self-esteem.* Positive self-esteem was measured using 4 items as listed in Table A.4 (Angel, Burton, Chase-Lansdale, Cherlin, & Moffitt, 2009). Response categories to the items
were anchored at 1 = *strongly disagree*, 2 = *slightly disagree*, 3 = *slightly agree*, and 4 = *strongly agree*. Positive self-esteem index computation was based on the 80% rule. This rule applied to positive self-esteem indicates that the index is computed only if at least 3 out of the 4 items have valid responses. Cronbach’s alpha for positive self-esteem in this study is .94 which is an indication of a strong reliability. The index was constructed by using the mean response of the items.

Factorial analysis applied to the 4 items suggested the factorability of positive self-esteem index. The examination of the initial eigenvalues, using PCA method, showed that one factor explained about 48% of the total variance. That is, 48% of the variance in the 4 items of positive self-esteem is explained by factor one. Given that Factor 1 accounted for a large proportion of the total variance, one factor is the solution. The results of the factor loading matrix also confirmed a one-factor solution since all of the 4 items of the index loaded strongly on Factor 1. The loadings of these 4 items ranged between .621 and .748.

The results of inter-items correlation, in Table A.4, suggest that the items of positive self-esteem index are positively associated with each other. The inter-items correlation matrix for the index indicates that the weakest correlation coefficient is .23 and represents the association between I am useful person to have around and I am satisfied with myself. The highest coefficient is .35 and represents the correlation between doing things as well as others and person of worth and equal to others. The correlation between I am useful person to have around and person of worth and equal to others also has a coefficient of .35. Table A.4 also shows that mothers, on average, are more likely to report that they slightly agreed with the item “I am useful person to have around” ($M = 3.63, \ SD = .79$), while they are less likely to indicate that they slightly agreed with the item “satisfied with myself” ($M = 3.37, \ SD = .84$).
Negative self-esteem. Negative self-esteem was measured using 5 items as in Table A.4 (Angel et al., 2009). Response categories to the items of the index were anchored at 1 = strongly disagree, 2 = slightly disagree, 3 = slightly agree, and 4 = strongly agree. Negative self-esteem index computation was based the 80% rule. This rule applied to negative self-esteem indicates that the index is computed only if at least 4 out the 5 items have valid responses. Cronbach’s alpha for negative self-esteem in this study is .76 which is an indication of acceptable coefficient of reliability. The index was constructed by using the mean response of the items.

Factorial analysis applied to the 5 items suggested the factorability of negative self-esteem index. The examination of the initial eigenvalues, using PCA method, showed that one factor explained about 51% of the total variance. That is, 51% of the variance in the 5 items of negative self-esteem is explained by Factor 1. Given that Factor 1 accounted for a large proportion of the total variance, one factor is the solution. The results of the factor loading matrix also confirmed this one-factor solution as all of the 5 items of the index loaded strongly on Factor 1. The loadings of these 5 items ranged between .686 and .744.

The results of inter-items correlation of negative self-esteem index suggest that the items are positively associated with each other. The weakest correlation coefficient for the index is .32 and represents the association between wish more respect for myself and don’t have much to be proud of. The highest coefficient is .47 and represents the correlation between I can’t do anything right and feel I am not good at all. Table A.4 also suggests that, on average, mothers are more likely to report that they strongly disagreed with the item “wish more respect for myself” ($M = 1.74$, $SD = 1.09$), while they are less likely to indicate that they strongly disagreed with the item “can’t do anything right” ($M = 1.43$, $SD = .80$).
Emotional support. This variable was measured by a single item (Durden et al., 2007). Respondents were asked to identify the number of people they could count on when they were feeling low. Response categories range from $1 = \text{enough people}$ to $3 = \text{no one}$. These response categories were reverse coded so that higher values represent higher level of emotional support.

Instrumental support. Instrumental support was measured by three items listed in Table A.5 (Durden, et al., 2007; Ghazarian & Roche, 2010). Response categories to the items of the index were originally coded as follows: $1 = \text{enough people}$, $2 = \text{too few}$, and $3 = \text{no one}$. These response categories were reverse coded so that higher values indicate more emotional support. Instrumental support index computation was based the 80% rule. This rule applied to instrumental support indicates that the index is computed only if at least 2 out the 3 items have valid responses. Cronbach’s alpha for instrumental support in this study is .80 which is an indication of a relatively strong reliability. The index was constructed by using the mean response of the items.

Factorial analysis applied to the 3 items suggested the factorability of instrumental support index. The examination of the initial eigenvalues, using PCA technique, showed that one factor explained about 71% of the total variance. That is, 71% of the variance in the 3 items of instrumental support is explained by Factor 1. Given that factor accounted for a large proportion of the total variance, one factor is the solution. The results of the factor loading matrix confirmed this one-factor solution since all the 3 items of the index loaded strongly on Factor 1. The loadings of these 3 items ranged between .816 and .883.

The results of inter-items correlation matrix, in Table A.5, shows that the items of instrumental support index are positively associated with each other. Table A.5 also indicates that the weakest correlation coefficient is .49 and represents the association between people to
loan money and people to take care of children. The highest coefficient is .63 and represents the correlation between people to loan money and person of people for favor. Table A.5 reveals that, on average, mothers are more likely to report they had too few people take care of their children ($M = 2.40$, $SD = .70$), while the are less likely to indicate that they had too few people to lend them money ($M = 2.15$, $SD = .75$).

**Age of the focal child.** This variable was measured in years.

**Gender of the focal child.** This variable was coded as follows: 1 = female, 0 = male.

**City of residence.** The interview was conducted in three U.S. cities: Boston, Chicago, and San Antonio. The variable city of residence was coded as two dummy variables designating Boston (=1; else = 0), Chicago (= 1; else = 0), and San Antonio as the reference category.

**Challenging parenting.** Challenging parenting was measured using 6 items as listed in Table A.6 (Waller & McLanahan, 1999). Response categories to the items of the index were rated on 5-point Likert scale as follows: 1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, and 5 = strongly agree. Challenging parenting index computation was based the 80% rule. This rule applied to maternal distress in this study indicates that the index is computed only if at least 5 out the 6 items have valid responses. Cronbach’s alpha for challenging parenting in this study is .77 which is an indication of an acceptable coefficient of reliability. The index was constructed by using the mean response of the items.

Factorial analysis applied to the 6 items suggested the factorability of challenging parenting index. The examination of the initial eigenvalues, using PCA method, showed that one factor explained about 47% of the total variance. That is, 47% of the variance in the 6 items of challenging parenting is explained by Factor 1. Given that factor accounted for a large proportion of the total variance, one factor is the solution. The results of the factor loading matrix confirmed
this one-factor solution since all of the 6 items of the index loaded strongly on Factor 1. The loadings of these 6 items ranged between .579 and .621.

In addition to factor analysis, inter-items correlation matrix was performed (Table A.6). The results suggest that the items of challenging parenting index are positively associated with each other. The inter-items correlation matrix for the index indicates that the weakest correlation coefficient is .25 and represents the association between so much parenting no time for self and don’t have a much patient as should. The highest coefficient is .50 and represents the correlation between overwhelmed by responsibilities as parent and so much parenting no time for self. Table A.6 also suggests that, on average, mothers are more likely to report that they neither disagreed nor agreed with the item “parenting harder than I thought” ($M = 3.26$, $SD = 1.43$), while they tend to report less that they disagreed with the item “don’t have a much patient as should” ($M = 2.21$, $SD = 1.20$).

*Financial strain.* Financial strain was measured using 5 items as in Table A.7 (Angel et al., 2009). Response categories to the items were rated on 5-point Likert scale; however, they were not uniformly coded. To solve this problem, two transformations were made. First, one of the five items, enough money for housing/food/clothing was reverse coded so that higher values indicate higher level of financial strain. Later on, the standardization procedure was performed in order to combine and calculate the average of all the 5 items. The resulting Z-scores were used to compute financial strain index. The 80% rule applied to financial strain indicates that the index is computed only if at least 4 out the 5 items have valid responses. Cronbach’s alpha for challenging parenting in this study is .79 which is an indication of a good coefficient of reliability. The index was constructed by using the mean response of the items.
Factorial analysis applied to the 5 items suggested the factorability of financial index. The examination of the initial eigenvalues, using PCA technique, showed that one factor explained about 55% of the total variance. That is, 55% of the variance in the 5 items of financial strain is explained by Factor 1. Given that factor accounted for a large proportion of the total variance, one factor is the solution. The result of the factor loading matrix also confirmed a one-factor solution since all of the 5 items of the index loaded strongly on Factor 1. The loadings of these 5 items ranged between .668 and .805.

The results of inter-items correlation matrix suggest that the items of the index are positively associated with each other (Table A.7). The correlations range from weak (.32) to moderate (.55). The weakest correlation coefficient of .32 represents the association between enough money for housing/food/clothing and borrow money pay bills. The highest coefficient, which is .55, represents the correlation between pay bills difficulties and delay buying something.

Perceived neighborhood disorder. Perceived neighborhood disorder was measured by 10 items as listed in Table A.8 (Durden, et al., 2007). The responses categories for these items were coded 1 = not a problem, 2 = somewhat of a problem, and 3 = a big problem. Perceived neighborhood disorder index computation was based the 80% rule. This rule applied to perceived neighborhood disorder shows that the index is computed only if at least 8 out the 10 items have valid responses. Cronbach’s alpha for neighborhood disorder in this study is .90 and suggests that the index is strongly reliable. The index was constructed by using the mean response of the items.

Factorial analysis applied to the 10 items suggested the factorability of neighborhood disorder index. The examination of the initial eigenvalues, using PCA method, showed that one
factor explained about 53% of the total variance. That is, 53% of the variance in the 10 items of neighborhood disorder is explained by Factor 1. Given that factor accounted for a large proportion of the total variance, one factor is the solution. The results of the factor loading matrix confirmed this one-factor solution since all of the 10 items of the index loaded strongly on Factor 1. The loadings of these 10 items ranged between .595 and .813.

The inter-items correlation matrix Table A.8 reveals that the items of neighborhood disorder index are positively associated with each other. A further examination of Table A.8 indicates that the weakest correlation coefficient is .34 and represents the association between neighborhood/police not available and neighborhood/high unemployment. The highest coefficient is .70 and represents the correlation between neighborhood/open drug dealing and neighborhood/gangs activities. Table A.8 also indicates that, on average, mothers are more likely to report that high unemployment was not a problem in their neighborhood \((M = 2.09, SD = .79)\), while they are less likely to indicate that abandoned houses were not a problem in their neighborhood \((M = 1.50, SD = .74)\). For the analyses purposes, the index was dichotomized into two categories \((1 = \text{no problems}; 0 = \text{at least one problem})\)

**Analytical Strategy**

To evaluate the relationship between maternal distress and children’s delinquency, this study uses two different levels of analysis. The first is univariate, which provides descriptive statistics on the variables of interest. The importance of this first level of analysis resides in the fact that it allows readers to have a general idea of the sample’s characteristics. Another advantage of this first stage is that its results provide critical information about the data and guide the choice of the statistical techniques for the next steps in the analysis process.
The second level consists of multivariate analysis and uses the technique of multiple regression. The purpose of this second level of analysis is to investigate the association between maternal distress and children’s delinquency while assessing the relative effects of the control variables. Not only does this statistical technique allow evaluating the strength and direction of the association between maternal distress and children’s delinquency but also the regression coefficients for the control variables. Four regression models were estimated to test the hypotheses of this study. In the first model, the dependent variable, maternal distress, is regressed on the independent variable, children’s delinquency. As mentioned earlier, children’s delinquency is expected to increase maternal distress. In the second and third models, additional variables are included, to see if the predicted effect of children’s delinquency holds up, after the effects of these other variables are taken into account. The fourth model includes three interaction terms (children’s delinquency*employment, children’s delinquency*frequency of religious services attendance, and children’s delinquency*neighborhood disorder). The inclusion of these interaction terms tests whether, as posited, the effect of children’s delinquency on maternal distress is moderated by three “postmodernity” variables, maternal employment, maternal attendance at religious services, and maternal neighborhood. That is, it examines whether the positive effect of children’s delinquency on maternal distress is weaker when the mother is employed, attends religious services frequently, and/or lives in a neighborhood with no problems.

Not only does the regression technique help in testing the hypotheses of the study, but it also provides necessary results to check for potential multicollinearity problems. The examination of the tolerance reveals several values below the generally accepted cut-off point of .40 (Allison, 1999). The corresponding variance inflation factor (VIF) values were also above
2.50 (Allison, 1999). The analysis of these values of tolerance and VIF suggests the existence of multicollinearity problems in the data. However, the problematic variables were not transformed because multicollinearity was expected.
CHAPTER IV
ANALYSIS AND FINDINGS

The fourth chapter has only two sections and presents the analyses and the interpretation of the results. The first section reports the result of the univariate analysis such as the minimum, the maximum, the means, and the standard deviation values. The second section presents the multivariate analysis of the study.

Univariate Analysis

Table 1 presents the minimum and the maximum values, the means, and the standard deviations of the variables used in the study. An examination of this Table 1 shows that the average answer among the respondents, i.e., mothers, on the distress items is “not at all” ($M = 1.34, SD = .49$). That is, mothers did not on average seem to experience the symptoms of distress. The mothers tend to report that the delinquency items do not apply to their children ($M = 1.16, SD = .20$). They are more likely to disagree strongly with the statements of negative self-esteem ($M = 1.53, SD = 61$), but tend to slightly agree with the items of positive self-esteem ($M = 3.55, SD = 53$). On average, mothers tend to disagree with being challenged by the demands of parenting role ($M = 2.73, SD = .90$). Regarding the support system, they indicate that they tend to have, on average, too few people to count on for emotional support ($M = 2.45, SD = .65$) and instrumental support ($M = 2.32, SD = 58$).

Table 1 also presents the descriptive statistics of sociodemographics factors of the respondents. The results on Table 1 shows that, on average, mothers have high school diploma ($M = 3.93, SD = 2.11$) and have a mean monthly income of $1758.00 ($SD = 1181.52$). They also tend to not be married. Most of them are unmarried (77%) and relatively young ($M = 37.15,$
Among these mothers very few are white (6%). Most of them are Hispanic (50%) followed by Black (44%). While the racial composition of the sample shows a disproportion, the geographical distribution indicates more similarity among the respondents. That is, similar number of mothers was selected in each of the three cities in which the data were collected. Among mothers, 31% reside in San Antonio, 34% in Chicago, and 35% in Boston. The majority of them was employed (54%) and reported the existence of neighborhood problems in the areas where they resided (88%). About 56% never attend religious services or do so only about a few times.

Table 1 also presents children’s characteristics. Child age ranges from 5 to 18 years. The average age of children is about 11 years ($SD = 4.49$). About half of these children are boys (51%).
### Table 1

**Minimum, Maximum, Means, and Standard Deviation of the Sample (N = 1355)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
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</thead>
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<td>1.34</td>
<td>.49</td>
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<td>1.16</td>
<td>.20</td>
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<td>.61</td>
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<td>-.00</td>
<td>.74</td>
</tr>
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<td>5.00</td>
<td>2.73</td>
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<td>.65</td>
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**Notes.**
- Gender of child (1 = female; 0 = male)
- Marital status (1 = married; 0 = else)
- Race (White as the reference category)
- Religion (1 = 1 to 2 times and more than once/week; 0 = never to a few times)
- Neighborhood (1 = not a Problem; 0 = a problem)
- Employment (1 = employed; 0 = not employed)
- City of interview (San Antonio as the reference category)

### Multivariate Analysis

Table 2 presents the results of four regression models. Model 1 estimates the relationship between maternal distress and children’s delinquency. The second model (Model 2) assesses the association between the two variables in the first model by controlling for the effects of sixteen other variables such as negative self-esteem, positive self-esteem, financial strain, challenging parenting, emotional support, instrumental support, marital status (a dummy variable in which 1
= married), education, income, child age, child gender (1 = female), Black (White as reference), Hispanic (White as a reference), age, Boston (San Antonio as reference), and Chicago (San Antonio as reference). Model 3 has three more variables than the previous model (Model 2). The three new variables that distinguish Model 3 from Model 2 are the “postmodernity” variables, employment status, frequency of religious service attendance, and level of neighborhood problems. The last model, Model 4, adds the interaction terms. The interaction terms were created by multiplying children’s delinquency by each one of the three postmodernity variables (CD * employment status, CD * neighborhood disorder, and CD * frequency of religious service attendance).

The examination of the regression Table 2 indicates that Model 1 is statistically significant $R^2 = .07, R^2 \text{ adj} = .07 F (1, 1353) = 102.08, p < .001$. The $R^2$ of .07 suggests that about 7% of the variation in maternal distress is explained by their children delinquency. The unstandardized coefficient of .66 associated with children’s delinquency represents the correlation coefficient between maternal distress and children’s delinquency. The $b$ of .66 means that, on average, maternal distress increases by .66 points for each additional increase in children’s delinquency levels.

Model 2 contains sixteen new variables than Model 1. The observation of Model 2 indicates that it significantly predicts maternal distress, $R^2 = .30, R^2 \text{ adj} = .30 F (17, 1337) = 34.393, p < .001$. The $R^2$ of .30 indicates that 30% of the variation in maternal distress is explained by its linear relationship with children’s delinquency, negative self-esteem, positive self-esteem, financial strain, challenging parenting, emotional support, instrumental support, marital status, education, income, child age, child gender, Black, Hispanic, age, Boston, and Chicago. The introduction of the new variables substantially decreases the correlation between
maternal distress and children’s delinquency. From .66 in the Model 1, the b for the correlation between maternal distress and children’s delinquency changes to .38 in Model 2. Despite this decrease in the unstandardized coefficient, the p value associated with it remains significant (p < .001). Besides the b of children’s delinquency, several other coefficients are also statistically significant in Model 2. For example, the coefficients of .16 (p < .001), -.11 (p < .001), .15 (p < .001), .07 (p < .001), -.05 (p < .05), and .01 (p < .01) respectively for negative self-esteem, positive self-esteem, financial strain, challenging parenting, emotional support, and child gender indicate that these variables are significant predictors of maternal distress. The b of .16 for negative self-esteem signifies that, on average, maternal distress increases by about .16 points for each additional increase in negative self-esteem levels, all else being equal. The b of -.11 for positive self-esteem means that, on average, maternal distress decreases by about .11 points for each additional increase in positive self-esteem levels, all else being equal. The b of .15 for financial strain suggests that maternal distress increases, on average, by .15 points for each additional increase in financial strain levels, all else being equal. The b of .07 for challenging parenting shows that maternal distress increases, on average, by .07 points for each additional increase in challenging parenting levels, all else being equal. The b of -.05 for emotional support suggests that maternal distress decreases, on average, by .05 points for each additional increase in emotional support levels, all else being equal. The b of .01 for child gender indicates that distress levels increase by .01 point, on average, for girls’ mothers than boys’ mothers, all else being equal.

In Model 3, the unstandardized coefficient of children’s delinquency is further decreased by the introduction of three “postmodernity” variables (employment status, religious frequency, and neighborhood disorder). From .38 (p < .001) in Model 2, the b of children’s delinquency
decreases slightly to become .36 ($p < .001$) in Model 3. The positive $b$ (.36, $p < .001$) for children’s delinquency indicates that children’s delinquency is positively related to maternal distress. Consequently, Hypothesis 1, which stated that children’s delinquency will have a positive effect on maternal distress, is supported.

Model 3 is significant, $R^2 = .32$, $R^2$ adj = .31, $F (20, 1334) = 30.989$, $p < 001$. The introduction of the three variables (employment status, religious frequency, and neighborhood disorder) not only changes the correlation between children’s delinquency and maternal distress but also the significance level of the predictor education. Insignificant in the previous Model 2, education become significant in the third model ($b = .01, p < .05$). A close look at these three new variables in Model 3 shows that employment status and religious service attendance are statistically significant. The $b$ of -.11 ($p < .001$) associated with employment status suggests that, on average, the distress levels decrease by .11 points for mothers who were employed compared those who were not, all else being equal. The $b$ of -.05 ($p < .05$) related to the frequency of religious service attendance indicates that, all else being equal, the distress levels decrease, on average, by .05 points for mothers who attended religious service from once to twice per month or more than once per week compared to those who never or attended services only a few times. The third variable of the set of three entered in Model 3, neighborhood disorder, is not significant, but the direction of its coefficient is interesting. The $b$ of -.01 for neighborhood disorder signifies that the distress levels decrease, on average, for mothers who did not perceive any neighborhood problems than those who reported neighborhood disorder in their area of residence, all else being equal.

The full model, which is Model 4, contains the three interaction terms. An examination of the forth model shows that none of the three interaction terms is significant. A comparison of
Model 3 and Model 4 shows that both models have the same $R^2$ and the $R^2$ adj. The $R^2$ of .32 signifies that each of these models explain 32% of the total variation in maternal distress. This identical $R^2$ means that the full model, Model 4, with interaction terms ($F(23, 1331) = 27.175, p < .001$) did not help in improving the accuracy in predicting maternal distress compared to the main effect model (Model 3) ($F(20, 1334) = 30.989, p < .001$).

Later on, Model 4 was re-estimated three times by omitting a pair of interaction terms each time using backward deletion. The purpose of this re-estimation of the full model is determine if any of the three interaction terms can significantly improve the explained variation in maternal distress. The examination of the results of these additional regression models (not shown) indicates none of them improved the prediction of maternal distress. In fact the $R^2$ remained the same in all the three additional models as in Model 3 and in Model 4 with the three interaction terms ($R^2 = .32$).

Despite the fact that Model 4 did not improve the accuracy in the prediction of maternal distress, it is important because it helps in testing the second hypothesis of this study. The b of -.05 ($p = .670$) indicates that the interaction between children’s delinquency and employment status is not significant. That is, all else being equal, employment did not moderate the effect of children’s delinquency on maternal distress. The b of -.14 ($p = .235$) for the interaction between children’s delinquency and religious service attendance shows that this interaction is not significant. The insignificance of this interaction suggests that religious service attendance did not moderate the effect of children’s delinquency on maternal distress. The b = -.42 ($p = .107$) for neighborhood reveals that the interaction between children’s delinquency and neighborhood is insignificant. Thus, there is no evidence showing that neighborhood disorder moderated the effect of children’s delinquency on maternal distress, all else being equal. Given that none of the
three interaction terms is statistically significant, Hypothesis 2, which stated that the positive association between children’s delinquency and maternal distress will be stronger when mother is unemployed, attends religious services infrequently, and lives in a disordered neighborhood, is rejected.

Table 2

Maternal Distress Regressed on Children’s Delinquency (N = 1354)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
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<tr>
<td></td>
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<td>B</td>
<td>SE</td>
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<td>.36***</td>
<td>.06</td>
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<td>.02</td>
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<td>.07***</td>
<td>.01</td>
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<td>.04</td>
<td>.45</td>
<td>.29</td>
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</table>

|                                | Model 1  | Model 2  | Model 3  | Model 4  |
|                                | B        | SE       | B        | SE       |
| CD * Employment                |          |          |          | -.05     | .16      |
| CD * Religious service         |          |          | -.14     | .12      |
| CD * Neighborhood disorder     |          |          | -.42     | .26      |
| Constant                       | .57***   | .08      | .98***   | .16      | 1.02***  | .16      | 1.03***  | .17      |
| R²                             | .07      | .30      | .32      | .32      |
| R² adj                         | .07      | .30      | .31      | .31      |

Note. * p < .05; ** p < .01; ***p < .001 (two-tailed tests)
B: Unstandardized coefficient
SE: Standard error
CHAPTER V
DISCUSSION

This chapter provides an overview of the results of the analysis. It also contains the information on whether or not the hypotheses formulated in the second chapter were supported by the data. The explanation of the results using the theoretical framework is presented in this chapter. Additionally, the fifth chapter indicates how the study compares to previous research.

This study investigates the influence of postmodern factors on the relationship between maternal distress and children’s delinquency. The purposes of the study are twofold. First, it seeks to contribute to the understanding of maternal distress as it is related to children’s delinquency in postmodern society. Second, the understanding of how postmodern factors affect the correlation between children’s delinquency and maternal distress can have consequences on policies guiding the assistance to low-income families. To reach these objectives, two hypotheses were formulated to guide the study: Hypothesis 1 stated that children’s delinquency will have a positive effect on maternal distress; Hypothesis 2 posited that the association between children’s delinquency and maternal distress will be moderated by factors such as maternal employment, attendance at religious service, and level of neighborhood disorder. Specifically, the positive association between children’s delinquency and maternal distress will be stronger when parent is unemployed, attends religious services infrequently, and lives in a disordered neighborhood. To test these hypotheses, several regression analyses were conducted and three interaction terms were created. The interactions between children’s delinquency and employment status, children’s delinquency and religious service attendance, children’s delinquency and neighborhood disorder were created to test the second hypothesis.
In total, four regression models were estimated with the third model as the main effects model (Model 3) and the forth one (Model 4) the interaction terms effects model. The analysis of the results of the interaction effects model (Model 4) suggested that none of the three interaction terms children’s delinquency and employment status (b = -.05, \( p = .670 \)), children’s delinquency and religious service attendance (b = -.14, \( p = .235 \)), and children’s delinquency and neighborhood disorder (b = -.42, \( p = .107 \)) was statistically significant. Therefore, the second hypothesis was rejected.

Unlike Hypothesis 2, the data provided support for Hypothesis 1. In fact, the results of the regression Model 3, the main effect model, indicated the existence of a positive correlation between children’s delinquency and maternal distress (b = .36, \( p < .001 \)), which confirmed the first hypothesis of this study. Not only do the findings confirm Hypothesis 1, they also provide support for past research (Duchovic et al., 2009; Hastings, 2002, 2003; Mash & Johnston, 1990). More specifically, these findings suggest that the distress levels of mothers increases with the increase in delinquency level of their children. Having a child who drinks alcohol, disobeys, attacks or breaks rules, for instance, is heartbreaking for mothers. Children who break rules are obviously delinquent and, for the most part, criminals with regard to the law. The association of these negative attributes with children will possibly give parents restless sleep and make them worry about the future of their children, a combination of which can lead to an increase in maternal distress.

A further examination of Model 3 revealed interesting findings. For example, Model 3 indicates that employment status has a significant effect on maternal distress (b = -.11, \( p < .001 \)). This coefficient suggests that, on average, the distress levels decrease for mothers who were employed compared those who were not. This negative relationship between employment status
and maternal distress follows the general pattern found in studies between employment and individuals’ mental health (Helbig et al., 2006; Mirowsky & Ross, 2003; Olsson & Hwang, 2001). The positive influence of being employed on maternal distress can be understood from the postmodernity perspective. In the period of postmodernity characterized by flexibility, chaos, disorder, and precariousness in all sectors of the society including job markets, having employment will correlate with less maternal distress than unemployment. Being employed will cut down on mothers’ level of distress. One possible way to explain the buffering effect of employment on the distress levels of mother is through income. Receiving income will make a difference in the distress levels between mothers. In other words, mothers who are employed have to worry less about economic hardship than mothers who are unemployed.

As with employment status, religion service attendance is also negatively correlated with maternal distress. In fact, the b of - .05 (p < .05) suggests that religion service attendance have a significant mitigating effect on maternal distress. This negative unstandardized coefficient indicates that mothers that attend religious service frequently (one to two times per month or more than once a week) are better off than those who are less frequent (a few times or do not attend at all). This finding in the present study regarding the buffering effect of religion service attendance confirms the conclusion of past studies in the area of coping mechanisms (Johnstone, 2001; Roberts, 2004; Schwab, 1990). The beneficial influence of religion on maternal distress levels can be attributed to two key important functions played by religion which are comfort and reassurance. Mothers who frequently attend religious service are more likely to capitalize on these comforting and reassuring roles of their religion to navigate through difficult times and disappointment. More specifically, mothers who attend religious service are more likely to exercise their faith during times of difficulty. Having a strong faith in a Supreme Being, who is
in control of everything, can be used by mothers to explain why they are experiencing difficulties. Using this faith in a Supreme Being can help mothers coping with their distress by reasoning that whatever they are going is the will of God. Not only a strong faith will lessen the negative emotions related to disappointments experienced by mothers, but also it can help in our current postmodern society where nothing is sure. The conviction that God or a Supreme Being is in control of the occurrence of every event translates to the belief that everything happens according to a divine purpose. That is that the apparent disordered and chaotic conditions of the postmodern society are in fact divinely ordered. Such a belief will have profound implications on the mental health of individuals. For example, this belief will give the individuals a sense of comfort and reassurance over their precarious conditions. Additionally, these individuals will gain a sense of meaning, identity, and a point of reference in the disorientating and instable postmodern society. Consequently, mothers will worry less about their misfortunes since God is in control and will turn these problems around in due season.

Unlike employment status and religion which have mitigating effects on the distress level of mothers, neighborhood disorder did not have a significant influence on maternal distress. However, the direction of the coefficient for perceived neighborhood disorder is of interest. The negative sign of the coefficient suggests that mothers who did not perceive any disorder problems in their neighborhood were more likely to have a lesser distress level compared to those who did. The mitigating effects of the perception of neighborhood problems on maternal distress can possibly be explained through the concept of insecurity, which is one of the characteristics of postmodern society. Living in an insecure neighborhood will make mothers suspicious about their neighbors. As a result of the atmosphere of mistrust, neighbors will become strangers to each other. Given that individuals have a tendency to fear the stranger or the
unknown, parents can possibly develop the symptoms of phobia. Thus, neighborhood characterized by disordered can lead to mental health problems in mothers.

Model 3 showed some other findings that are worthwhile mentioning. For example, negative self-esteem had a negative effect on maternal distress ($b = .15, p < .001$). The tendency of maternal distress to increase as mothers scored high on negative self-esteem confirms the results of past studies on mental health and coping mechanisms (Lazarus & Folkman, 1984; Mirowsky & Ross, 2003). From the negative effect of negative self-esteem on maternal distress, one can deduce a positive effect of a positive self-esteem on maternal distress. In fact, the $b$ of positive self-esteem which is $-.11 (p < .001)$ is indicative of the positive effect or the buffering effect of positive self-esteem on maternal distress. This result for positive self-esteem follows the same pattern found in past studies on coping mechanisms (Pearlin, 1999; Weiss & Lonnquist, 2009).

Additionally, the study reveals that financial strain ($b = .15, p < .001$) and challenging parenting ($b = .07, p < .001$) had significantly negative effects on maternal distress. These negative effects of financial strain on maternal distress, which means that the increase of parental financial strain is associated with an increase in maternal distress levels, is similar to findings on income or SES and individuals’ mental health (Hastings, 2002; Horwitz, 2002; Simon, 2000). Past studies on children’s behavior and parental stress also agree with the negative effect of challenging parenting on maternal distress (Crnic & Acevedo, 1995; Duchovic et al., 2009; Pelham & Lang, 2000).

The study indicates that among the support systems, only emotional support was significantly and negatively correlated with maternal distress ($b = -.05, p < .05$). This negative coefficient indicates that emotional support has a positive influence on maternal distress. The
buffering effect of emotional support against individuals’ mental health problems have been reported by several studies (Mirowsky & Ross, 2003).

Other factors which had a significant influence on maternal distress are education and the child’s gender. Results pertinent to the gender of the child appear to be at odds with the findings of most past studies. The majority of previous research reported that mothers are more stressed with boys than girls (Emerson, 2003; Stores et al., 1998). However, the present study indicates that the gender of the child was significantly and positively correlated to maternal distress (b = .01, \( p < .001 \)). More explicitly, the study suggests that distress levels increase girls’ mothers than boys’ mothers. This unusual finding regarding the positive relationship between the gender of the child and maternal distress can be attributable to the special nature of the data (collected among low-income families).

Against all expectations, education was significantly and positively correlated to maternal distress. Usually education is negatively associated with individuals’ mental health problems; which means that increases in level of education are associated with a lower level of distress (Horwitz, 2002; Ross et al., 2000). The odd findings for the effects of education on maternal distress can be linked to the special nature of the respondents. Given that the respondents were selected among low-income families, it is possible that an increase in their year of education will put them in a situation where they will be classified as borderline to receive government assistance, and yet they do not have enough educational background to make it on their own financially. Thus, an increase in education levels can lead to the loss of benefits, which can be a source of financial strain and hardship that will increase the distress levels of mothers, especially when they cannot provide a proper care for their children.
CHAPTER VI
CONCLUSION

The chapter 6, the final chapter, has two sections. The first section is labeled conclusion and limitations and as such, it presents a general summary of the whole study. It contains an overview of the objectives of the study and indicates whether or not these objectives were achieved. This first section also contains the limitations of the study. The second section presents the implications and the strengths of the study. This section specifically shows how the study contributes to the advancement of sociological knowledge as a whole and sociology of mental health and illness in particular.

Conclusion and Limitations

This study investigated the impacts of postmodernity factors on maternal distress and children’s delinquency it has some limitations. First, the data used in this research were collected in only three cities of the United States: Boston, Chicago, and San Antonio. Given that these three geographic locations are not representative of all the cities in the United States, findings should be interpreted with caution. Second, only mothers were investigated as data on fathers were few (N = 19). Third, given that this study is focused on the third wave, it did not check for the reciprocal effect of maternal distress and children’s delinquency. That is, the study was unable to check for the potential effect of maternal distress on children’s delinquency. Another limitation of the study is related to the fact that the data were collected among low-income families. The combination of these two limitations may potentially introduce some biases in the findings and consequently limit the generalizability of the study. With respect to these
limitations, future studies are warranted. Future studies should address the weaknesses of the present study.

Despite these limitations, the study revealed some important findings. The study shows that children’s delinquency affects their mothers’ distress levels. Postmodernity factors are also found to have significant influences on the distress levels of mothers. The study, for example, shows that being employed is an important mitigating factor for maternal distress. Additionally, religion is found to have a buffering effect on maternal distress. Regarding religion, the study revealed that attending religious services frequently is helpful in lowering maternal distress. While employment and frequency of religious service attendance are found to be moderating factors of maternal distress, neighborhood disorder is not. Moreover, the study leads to aggravating factors of maternal distress such as children’s delinquency, negative self-esteem, challenging parenting, financial strain, education, and child’ gender.

Implications

Practical Implications

The findings on the aggravating and mitigating factors of maternal distress constitute the importance of this study. Knowing these aggravating and buffering factors can influence practice approaches. For example, this study can affect the methodology of intervention used by agencies working with dysfunctional and low-income families. The results of the present study linking maternal distress to socioeconomic factors and the behavior problems of their children will give practitioners helping indigent parents with mental health problems an opportunity to consider another perspective different from the disease approach. Thus, practitioners should be careful and not treat all the cases of distress among mothers as hormonal imbalance and use the
medicalization as the exclusive therapy. That is, practitioners should consider the integration of the sociological approach into the assessment and the treatment of mental health problem of mothers. Given that the study suggests a positive correlation between education and maternal distress, it appears that not all types of maternal distress are biologically driven. In fact, this study shows that maternal distress is associated with social factors such as education. Consequently, sociological approach should be part of the arsenal of practitioners when dealing with distress among individuals from low-income families.

In addition to education, religion is another social factor related to maternal distress. However, conversely to education, religion is negatively related to distress levels among mothers. Thus, the study reveals that religion is important because it is can potentially reinforce the mental health of the individuals. Consequently, practitioners should be aware and capitalize on this positive and beneficial effect of religion on parental mental health.

Theoretical Implications

The study offers several theoretical contributions. First, none of the past studies on the general topic of children’s behavior problems and parental mental health has used the postmodern theoretical perspective. The current study provides such a test of this theory and shows that the interaction of children’s delinquency and postmodern factors do not significantly affect maternal distress. The study leads toward the results according to which each factor affects maternal distress separately and directly. Findings also indicate that being employed is negatively correlated with maternal distress. This result for employment supports the postmodernity theory. Second, the study points to a potential weakness in the postmodernist theory. The postmodernity theorists view our current society as characterized by instability,
chaos, precariousness, and uncertainty about the future. Not only is the postmodern theorists’ description of the society negative, catastrophic, and pessimistic, but it is also devoid of the religious element. The absence of the importance of religion in the analysis of postmodernity theorists is surprising given that early sociologists - Durkheim, Weber, and Marx - showed the undeniable effect of this institution of religion on individuals’ behaviors. Thus, the finding of the current study regarding the negative correlation between frequency religious service attendance and maternal distress suggests the important beneficial effect of religion on individuals’ mental health. In fact, in the chaotic and precarious context of the postmodern society, religion can provide a sense of meaning, identity, and stability which are critical for mental health of individuals.

Including religion in the postmodernity analysis of the society and the individuals’ behaviors makes perfect sense from a sociological stand point, especially when arguing from Weber’s perspective. Indeed, the Weberian analysis identifies religion as the root cause of the capitalism system. From this view, it appears that capitalism and its corollary of rationality can be linked back to religion. Given that postmodernity is the resulting effect of the advancement in capitalism and its constant search of rationality as well as efficiency, it is then clear that the characteristics of insecurity and flexibility attached to postmodern societies are connected to efficiency in capitalism which has its source in religion. As postmodernity is linked to religion, it is logical to include religion in the analysis and especially in the approaches of solutions to individuals’ problems, including health and mental health problems in postmodern society.
Research Implications

In addition to supporting the sociological approach to mental health problems among mothers, this study also uncovers potential problems that necessitate further investigation. The findings regarding the positive correlation between education and maternal distress may be an indication of problems regarding the criteria of eligibility for assistance among low-income families. Given that the data was collected among low-income families, it is possible that additional years of education can disqualify members of low-income families who were receiving assistance. In fact, if the additional level of education is not significant at the point of affecting positively the economic conditions of low-income families, then it seems clear that the level of education can disqualify these individuals for assistance; hence increasing their distress levels. Consequently, additional studies using various research methods - including qualitative and quantitative - and within different demographic groups are needed to untangle the relationship between education and maternal distress.

While the study calls for future investigations, it also suggests the reevaluation of the current criteria of eligibility for assistance used by agencies working with low-income families in terms of education categories. The purpose of this reevaluation is to monitor the impacts of additional levels of education on the financial stability of low-income families before disqualifying them. To effectively implement this reevaluation, agencies working with low-income families should include additional measures of assessment of needy families besides levels of education. The call for additional measures of assessment of poverty of low-income families was echoed in the report of the Stanford Center for the Study of Poverty and Inequality (Blank, 2011). The conclusion of this report proposes a Supplemental Poverty Measure (SPM),
which will be helpful in uncovering aspects of economic problems of low-income families not captured by the current and official poverty measures.
APPENDIX

SUPPLEMENTAL TABLES
Table A.1

*Maternal Distress Regressed on Children’s Delinquency (with outliers) (N = 1404)*

<table>
<thead>
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<th>Model 1</th>
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<th>Model 4</th>
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<td>Negative self-esteem</td>
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<td>-.07*** (.01)</td>
<td>-.07*** (.02)</td>
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<td>-.05* (.02)</td>
<td>-.06* (.02)</td>
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<td>-.04 (.03)</td>
<td>-.04 (.03)</td>
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<td>-.06* (.02)</td>
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<td>-.01 (.03)</td>
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<td>Education</td>
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<td>2.345E-5* (.00)</td>
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<td>.01** (.00)</td>
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<tr>
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<td>CD * Religious service</td>
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<td>-.48** (.16)</td>
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<tr>
<td>R² adj</td>
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*Note. *p < .05; **p < .01; ***p < .001 (two-tailed tests)*

B: Unstandardized coefficient  
SE: Standard error
Table A.2

*Descriptive Statistics and Inter-items Correlation Matrix for Maternal distress Index (N = 1771)*

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<th>17</th>
<th>18</th>
<th>M</th>
<th>SD</th>
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<td>.57</td>
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<td>.63</td>
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Total Means= 24.70
Total SD = 10.19
Table A.3

*Descriptive Statistics and Inter-items Correlations of Children’s Delinquency Index (N = 1472)*

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<th>13</th>
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<td>.41</td>
<td>.28</td>
<td>.25</td>
<td>.14</td>
<td>1.00</td>
<td></td>
<td>1.07</td>
<td>.30</td>
</tr>
<tr>
<td>13. Child steals outside home</td>
<td>.21</td>
<td>.25</td>
<td>.26</td>
<td>.24</td>
<td>.28</td>
<td>.27</td>
<td>.23</td>
<td>.35</td>
<td>.29</td>
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<td>.13</td>
<td>.56</td>
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<td>1.06</td>
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<td>Total Mean = 15.42</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total SD = 3.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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Table A.4

*Descriptive Statistics and Inter-items of Negative Self-esteem and Positive Self-esteem Indexes*

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<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td><strong>Negative self-esteem (N = 1720)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Feeling I am failure</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.45</td>
<td>.80</td>
</tr>
<tr>
<td>2. Don’t have much to be</td>
<td>.39</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>1.52</td>
<td>.86</td>
</tr>
<tr>
<td>Proud</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Feel I am not good at all</td>
<td>.38</td>
<td>.41</td>
<td>1.00</td>
<td></td>
<td></td>
<td>1.59</td>
<td>.89</td>
</tr>
<tr>
<td>4. Wish more respect for</td>
<td>.33</td>
<td>.32</td>
<td>.44</td>
<td>1.00</td>
<td></td>
<td>1.74</td>
<td>1.09</td>
</tr>
<tr>
<td>Myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I can’t do anything right</td>
<td>.39</td>
<td>.35</td>
<td>.47</td>
<td>.39</td>
<td>1.00</td>
<td>1.43</td>
<td>.80</td>
</tr>
<tr>
<td><strong>Total Mean</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>7.73</td>
<td>.84</td>
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<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive self-esteem (N = 1719)</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>1. Satisfied with myself</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.37</td>
<td>.84</td>
</tr>
<tr>
<td>2. Person of worth/equal</td>
<td>.32</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>3.59</td>
<td>.75</td>
</tr>
<tr>
<td>To others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Doing things as well as</td>
<td>.24</td>
<td>.35</td>
<td>1.00</td>
<td></td>
<td></td>
<td>3.58</td>
<td>.80</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I am useful person to</td>
<td>.23</td>
<td>.35</td>
<td>.33</td>
<td>1.00</td>
<td></td>
<td>3.63</td>
<td>.79</td>
</tr>
<tr>
<td>Have around</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Mean</strong></td>
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<td>14.17</td>
<td></td>
</tr>
<tr>
<td><strong>Total SD</strong></td>
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<td>4.78</td>
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Table A.5

Descriptive Statistic and Inter-items Matrix for Instrumental Support Index (N = 1710)

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<tr>
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<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. People take care of children</td>
<td>1.00</td>
<td></td>
<td></td>
<td>2.40</td>
<td>.70</td>
</tr>
<tr>
<td>2. People for favors</td>
<td>.59</td>
<td>1.00</td>
<td></td>
<td>2.38</td>
<td>.65</td>
</tr>
<tr>
<td>3. People to loan money</td>
<td>.49</td>
<td>.63</td>
<td>1.00</td>
<td>2.15</td>
<td>.75</td>
</tr>
</tbody>
</table>

Total Mean = 6.93
Total SD    = 1.77

Table A.6

Descriptive Statistic and Inter-items Matrix for Challenging Parenting Index (N = 1720)

<table>
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<tr>
<th></th>
<th>1</th>
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<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>1. Sometimes child really Bothers me</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.80</td>
<td>1.33</td>
</tr>
<tr>
<td>2. Parenting big job, cuts me From other people</td>
<td>.33</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.54</td>
<td>1.38</td>
</tr>
<tr>
<td>3. Don’t have as much Patience as should</td>
<td>.38</td>
<td>.29</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>2.21</td>
<td>1.20</td>
</tr>
<tr>
<td>4. Parenting harder than thought</td>
<td>.28</td>
<td>.40</td>
<td>.35</td>
<td>1.00</td>
<td></td>
<td></td>
<td>3.26</td>
<td>1.43</td>
</tr>
<tr>
<td>5. So much parenting, No time for self</td>
<td>.26</td>
<td>.44</td>
<td>.25</td>
<td>.44</td>
<td>1.00</td>
<td></td>
<td>2.99</td>
<td>1.37</td>
</tr>
<tr>
<td>6. Overwhelmed by Responsibilities as parent</td>
<td>.27</td>
<td>.41</td>
<td>.36</td>
<td>.45</td>
<td>.50</td>
<td>1.00</td>
<td>2.63</td>
<td>1.31</td>
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</table>

Total Mean = 16.43
Total SD    = 5.48
Table A.7

*Descriptive Statistics and Inter-items Correlation Matrix for Financial Strain Indexes (N = 1714)*

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<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Borrow money pay bills</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2. Delay buying something</td>
<td>.46</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>-.00</td>
<td>1.00</td>
</tr>
<tr>
<td>3. Pay bills difficulty</td>
<td>.50</td>
<td>.55</td>
<td>1.00</td>
<td></td>
<td></td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>4. Enough money for</td>
<td>.32</td>
<td>.42</td>
<td>.41</td>
<td>1.00</td>
<td></td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Housing/food/clothing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Money left month end</td>
<td>.37</td>
<td>.45</td>
<td>.48</td>
<td>.39</td>
<td>1.00</td>
<td>-.00</td>
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Total Mean = -.01  
Total SD = 3.70
Table A.8

Descriptive Statistic and Inter-items Matrix for Neighborhood Disorder Index (N = 1408)

<table>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Neighborhood/high</td>
<td>1.00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.09</td>
<td>.79</td>
</tr>
<tr>
<td>Neighborhood/Unemployment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Neighborhood</td>
<td>.36</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.50</td>
<td>.74</td>
</tr>
<tr>
<td>Abandoned houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Neighborhood/burglaries, Thefts</td>
<td>.36</td>
<td>.41</td>
<td>1.00</td>
<td></td>
<td></td>
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<td>1.71</td>
<td>.77</td>
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<tr>
<td>4. Neighborhood/assaults, Muggings</td>
<td>.40</td>
<td>.41</td>
<td>.64</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.57</td>
<td>.75</td>
</tr>
<tr>
<td>5. Neighborhood/gangs Activities</td>
<td>.41</td>
<td>.39</td>
<td>.51</td>
<td>.61</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.89</td>
<td>.84</td>
</tr>
<tr>
<td>6. Neighborhood/open Drug dealing</td>
<td>.44</td>
<td>.41</td>
<td>.46</td>
<td>.57</td>
<td>.70</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.90</td>
<td>.88</td>
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<tr>
<td>7. Neighborhood/unsupervised Children</td>
<td>.38</td>
<td>.38</td>
<td>.45</td>
<td>.50</td>
<td>.56</td>
<td>.64</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>1.88</td>
<td>.85</td>
</tr>
<tr>
<td>8. Neighborhood/teenage Pregnancy</td>
<td>.43</td>
<td>.38</td>
<td>.47</td>
<td>.53</td>
<td>.58</td>
<td>.60</td>
<td>.57</td>
<td>1.00</td>
<td></td>
<td></td>
<td>1.86</td>
<td>.84</td>
</tr>
<tr>
<td>9. Neighborhood/police Not available</td>
<td>.34</td>
<td>.35</td>
<td>.38</td>
<td>.45</td>
<td>.47</td>
<td>.50</td>
<td>.48</td>
<td>.46</td>
<td>1.00</td>
<td></td>
<td>1.54</td>
<td>.74</td>
</tr>
<tr>
<td>10. Neighborhood/unsafe Streets, daytime</td>
<td>.36</td>
<td>.39</td>
<td>.46</td>
<td>.56</td>
<td>.54</td>
<td>.53</td>
<td>.50</td>
<td>.55</td>
<td>.56</td>
<td>1.00</td>
<td>1.54</td>
<td>.73</td>
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</table>

Total Mean = 17.54
Total SD = 5.60
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