

PARENTAL SELF-EFFICACY: EXAMINATION OF A PROTECTIVE FACTOR FOR
PARENTS OF LOW-INCOME WITH YOUNG CHILDREN

By

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The purposes of this study were to assess (a) the direct effects of parental stress and depression on parental warmth and sensitivity, support for autonomy, and support for learning and literacy; and (b) the mediational effect of parental self-efficacy between stress and depression and these behavioral constructs for parents of low-income with young children. Participants included 152 parent-child dyads taking part in the “Parent Engagement and Child Learning: Birth to Five” project; children were between 2 to 51 months of age. Measures included parent reports of stress, depression, and self-efficacy, and video-taped parent-child interactions. Confirmatory factor analysis was conducted to determine the factor structure of the *Parent/Caregiver Involvement Scale* (P/CIS) used to code parenting behavior. Results supported the proposed three factor model of warmth and sensitivity, support for autonomy, and support for learning and literacy. Structural equation modeling (SEM) was used to test the direct and mediational effects for a mediational model. Results indicated that parental stress had a direct effect on all parenting behavioral constructs and parental self-efficacy; however, depression was found to have no direct effect on parental self-efficacy or the parenting behavioral constructs. Additionally, no mediational relationship was found for parental self-efficacy.

Acknowledgements

Many have wondered how is that I continued to persevere throughout the long and arduous process of completing my dissertation and ultimately graduate school. I have often said that completing this process is much like finishing a marathon. First of all, they both require large amounts of determination and drive to persist in spite of what appear to be insurmountable feats. But as anyone who has finished a marathon knows, you do not achieve this goal alone. Along the way you require the support of many important people who serve as coaches, running partners, and cheerleaders. It is now that I have completed the marathon task of my dissertation and graduate program that I would like to take this opportunity to thank those who have served to support me in these roles along the way.

First, I would like to thank Susan Sheridan who has served as my ultimate coach throughout my graduate career. As my advisor, she has provided me with superior guidance and mentorship that has helped me develop the skills and knowledge I needed to complete this leg of my journey, as well as to give me the confidence to continue to blaze my own path. She provided me with a multitude of learning opportunities beyond those that were expected and allowed me to cultivate my interests and specialties. It is for all of her outstanding “coaching” that I feel I have the “competence and confidence” to succeed and I am forever grateful.

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PREVIEW

CHAPTER 1

Introduction

It has been well established that living in poverty has significant detrimental effects on children and families. However, despite our current knowledge, technology, and federal programming, more and more children are being raised in poverty. In 2003, the national percentage of children under 18 that were being raised in poverty rose to 17.6%, placing them in the highest risk group for experiencing the harmful effects of poverty than any other age group (U.S. Bureau of Census, 2003). A wealth of knowledge exists about the risks that living in poverty pose on the mental and physical well-being of young children. Such risks include greater behavioral problems (Dodge, Pettit, & Bates, 1994; Duncan, Brooks-Gunn, & Klebanov, 1994; Korenman, Miller, & Sjaastad, 1995; McLeod & Shanahan, 1993), socioemotional issues (McLeod & Shanahan, 1993; McLoyd, 1998), impaired cognitive ability (McLoyd, 1998; Smith, Brooks-Gunn, & Klebanov, 1997), lower school achievement (Haveman & Wolfe, 1995; McLoyd, 1998), and diminished physical health (Brody, Pirkle, & Kramer, 1994; Shiono, 1995).

Most recently research in this area has begun to explore the importance of timing and persistence of poverty on children (Brooks-Gunn, Denner, & Klebanov, 1995; Haveman & Wolfe, 1994). Longitudinal research suggests that children who experience chronic economic strife early in life, as opposed to transient poverty experienced later on, will accrue more negative effects (Brooks-Gunn, Duncan, & Maritato, 1997). For example, children who received welfare during early childhood had lower school readiness scores, higher levels of grade failure, and lower school completion and literacy rates (Bayder, Brooks-Gunn, & Furstenberg, 1993; Guo, Brooks-Gunn, & Harris, 1996). For this reason, a major focus of research, policy, and

intervention efforts should be to understand and address issues related to socioeconomic disadvantage for young children and their families.

A great deal of research has been conducted identifying negative outcomes associated with poverty; however, fewer studies have investigated the many pathways through which poverty exerts its influence (Brooks-Gunn & Duncan, 1997). One proposed pathway through which poverty is thought to affect children is through parent-child interactions (Brooks-Gunn & Duncan, 1997). Research has linked socioeconomic disadvantage to many negative factors and outcomes associated with parenting, such as parental distress and maternal depression. Studies indicate that families experiencing financial hardships are likely to experience greater levels of stress (e.g., Conger et al., 1992; Elder, Conger, Foster, & Ardelet, 1992; Flanagan, 1990) and that this distress negatively impacts parenting behavior (McLoyd, 1990; Middlemiss, 2003). The same relationships have also been found for maternal depression (e.g., Kaplan, Roberts, Camacho, & Coyne, 1987; McGroder, 2000; Pearlin & Johnson, 1977; Radloff, 1975). However, the relationship between these psychosocial variables (i.e., stress and depression) and parenting behavior is not necessarily direct; there may be several variables that serve to mediate these relationships.

Although families with low-income are likely to encounter a higher number of risk factors (e.g., stress and depression) than those who are not poor, many in fact, continue to thrive. Thus, a shift in attention is needed from the detrimental effects of poverty to understanding the ways in which families function well, despite financial hardship. For example, Huston, McLoyd, and Garcia Coll (1994) have put forth a call for investigations leading to an in-depth understanding of the mechanisms that bring about positive parental socialization of young children living in impoverished family situations. To further such a cause, researchers must seek

to identify possible protective factors that can be enhanced to foster resilience for children and families of low-income.

One possible protective factor that has been theorized to buffer against the effects of stress and depression in adverse situations, such as financial hardship, is a strong sense of personal self-efficacy (Bandura, 2001). Self-efficacy is characterized as the belief in one's ability to exercise control over his/her own actions and environment (Bandura, 1977). It is viewed as the central concept of Bandura's social cognitive theory. Bandura's theory helps to explain the possible role of self-efficacy as a protective agent against the detrimental effects of poverty, specifically stress and depression. Thus, this theory serves as a guide in articulating the important variables selected for the proposed pathways examined in this study. The following section discusses Bandura's social cognitive theory and the important variables identified.

Social Cognitive Theory

Social cognitive theory was derived from earlier social learning theories. It was first proposed by Albert Bandura in 1986 with his publication of *Social Foundations of Thought and Action: A Social Cognitive Theory*. Bandura postulated that three main components comprise human functioning: (a) personal factors such as cognition, affect, and biological events; (b) behavior; and (c) environmental influences (see Figure 1). Bandura suggested that these three domains interact in a manner that creates a triadic reciprocity. What sets this theory apart from previous social learning theories is the emphasis on cognitive, self-regulatory, and self-reflective processes on human behavior. Social cognitive theory allows for personal agency to be accounted for in the dynamic relationship between environmental influence and behavioral reactions. This means that individuals have the capacity to act as proactive agents in their own development and actions. However, Bandura also recognized that the environment has a strong

influence on behavior, suggesting that people are both products and producers of their social systems and environments.

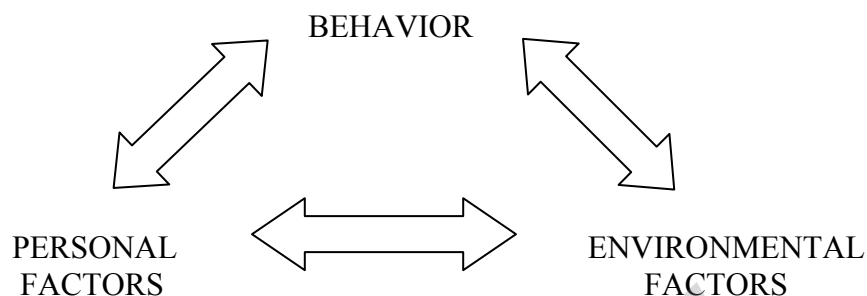


Figure 1. Bandura's Social Cognitive Theory

According to social cognitive theory, environmental agents or sociostructural variables produce behavioral effects by operating through psychological mechanisms of the individual. More specifically, educational and familial structures, socioeconomic status, and monetary conditions influence one's actions indirectly, rather than directly, largely through their impact on self-efficacy, affect, aspirations, personal standards, and other influences on self-regulation (Bandura, 1993; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996, 2001).

Of all of the cognitive processes included in this model, self-efficacy beliefs are thought to be at the core of social cognitive theory (Bandura, 1997). Self-efficacy is "concerned with the motivation, cognitive resources, and courses of action needed to exercise control over given events" (p. 472; Ozer and Bandura, 1990). Bandura (2001) states "efficacy beliefs are the foundation of human agency" (p. 10), in that unless people believe that they can produce a desired outcome and preclude a negative result by their actions, they are not likely to be motivated to act or persevere when faced with challenges. Thus, this core belief that one holds about his/her ability to produce desired outcomes is the key motivator behind one's actions. For

a review of research demonstrating the influence of efficacy beliefs on human functioning see Holden, Moncher, Schinke, and Barker (1990); Multon, Brown, and Lent (1991); and Stajkovic and Luthans (1998).

Self-efficacy beliefs are the central feature in the causal structure of the social cognitive model not only because of their direct influence on change and adjustment, but also through their impact on other variables (Bandura, 1997; Maddux, 1995; Schwarzer, 1992). For example, efficacy beliefs affect individuals' outlooks in terms of optimism or pessimism, and whether they think in ways that are self-enhancing or self-hindering. Such thoughts weigh heavily on (a) the challenges that people choose to undertake, (b) the amount of effort that they will expend, (c) how long they will persevere in the face of adversity, and (d) whether failures will be perceived as motivators or demoralizers (Bandura, 2001). Additionally, Bandura claims that a strong sense of coping efficacy reduces susceptibility to depression and stress in difficult situations and bolsters resilience to adversity (2001). Thus, according to Bandura's social cognitive theory, high levels of perceived self-efficacy serve as a protective influence against stress and depression.

Self-efficacy beliefs can be categorized into three groups: (a) global beliefs, (b) domain specific beliefs, and (c) task specific beliefs. Bandura (1977) contends that most self-efficacy beliefs are related to particular tasks; however, he suggests that certain beliefs have the potential of generalizing to a wide range of conceptually similar behaviors. The likelihood of this generalization is strongly dependent upon the similarity among the behaviors involved in the tasks, as well as the environmental context. Essentially, self-efficacy, as envisioned by Bandura (1989), is not a global, fixed, personality trait, but rather a dynamic component that is subject to change with the many interacting systems that influence an individual's development.

Domain-specific self-efficacy refers to the beliefs about one's abilities in a particular area of life (Woodruff & Cushman, 1993). It is considered to have a broader scope than task-specific self-efficacy and results from the culmination of efficacy information and experiences derived from similar tasks. Although Bandura suggests that assessment of self-efficacy should come from highly specified behaviors (e.g., assessing one's efficacy beliefs regarding his ability to change a tire) related to a certain domain (e.g., mechanical ability), researchers typically do not adhere to these recommendations and measure domain-specific beliefs via general self-efficacy responses related to a particular aspect of life (Lachman, 1983; Sherer et al., 1982; Woodruff & Cashman, 1993), such as parenting. The following section briefly discusses the domain of parental self-efficacy.

Parental Self-efficacy

A domain of self-efficacy that holds particular relevance in light of parent-child relationships is that of parental self-efficacy. Parental self-efficacy beliefs account for a significant amount of variance in relation to parenting skills and satisfaction (see Coleman & Karraker, 1997; Jones & Prinz, 2005). For example, research has demonstrated that parents with higher self-efficacy beliefs engage in more adaptive parenting practices, such as nonpunitive caretaking (Donovan, 1981; Donovan & Leavitt, 1985; Donovan, Leavitt, & Walsh, 1990; Izzo, Weiss, Shanahan, & Rodriguez-Brown, 2000; Shumow & Lomax, 2002; Unger & Waudersman, 1985), and report fewer child behavioral problems (Johnston & Mash, 1989). On the other hand, parents with low self-efficacy use more punitive parenting techniques (Donovan et al., 1990) and have greater child behavioral issues (Bugental & Shennum, 1984; Gibaud-Wallston & Waudersman, 1978; Halpern, Anders, Coll, & Hua, 1994).

Additionally, parental self-efficacy is inversely related to levels of parental stress (Erdwin, Buffardi, Casper, & O'Brien, 2001; Gross, Fogg, & Tucker, 1995; Jackson, 2000; Machida, Taylor, & Kim, 2002; Raikes & Thompson, 2005; Raver & Leadbeater, 1999; Scheel & Rieckmann, 1998) and maternal depression (Cutrona & Troutman, 1986; Gondoli & Silverberg, 1997; Gross, Conrad, Fogg, & Wothke, 1994; Gross, Sambrook, & Fogg, 1999; Teti & Gelfand, 1991); however, the direction of influence between parental self-efficacy and these two variables is unclear because a predictive relationship has been demonstrated in both directions (i.e., self-efficacy predicting parental stress and depression and vice versa). According to Bandura's self-efficacy theory, a strong sense of parental self-efficacy could be a protective factor in reducing the effects of stress and depression parents experience in relation to parenting, thus increasing the likelihood that they will engage in more positive parenting practices. For parents living in poverty, this is especially important because the increased levels of stress and depression that they experience can have significant detrimental effects.

As has already been demonstrated, the effects of poverty during the period of early child development are especially detrimental. This period (i.e., birth to approximately 5 years of age) is also important in relation to parents' developing self-efficacy. Research suggests that mothers' feelings of inadequacy during the early developmental stages of their child's life are likely to persist (Fleming, Ruble, Flett, & Shaul, 1988; Mash & Johnston, 1990). Additionally, throughout this period children begin to exert more autonomy and develop many motor and cognitive skills that are important for their success in later life. Conversely, parents begin to expect more compliance from their children and must exert greater levels of behavioral control (Crockenberg & Litman, 1990). Parents are also called upon to provide effective stimulation to foster their child's cognitive growth, placing them in a critical role as their child's first teacher.

Thus, this period of development can be an especially sensitive time for mothers' developing beliefs about their ability to successfully parent their child.

Important domains of parenting behavior associated with positive child development during this sensitive period include: (a) warmth and sensitivity (e.g., Ainsworth, Bell, & Stayton, 1972; Goldberg, 1990; Clarke-Stewart, 1973; DeKlyen, Speltz, & Greenberg, 1998; Estrada, Arsenio, Hess, & Holloway, 1987; Maccoby & Martin, 1983), (b) support for autonomy (e.g., Brier, 1995; Campbell, 1994; Campbell, March, Pierce, Ewing, & Szumowski, 1991; Coplan, Findlay, & Nelson, 2004; Herrenkohl & Russo, 2001; Smith, Landry, & Swank, 2000; Wood, 1980), and (c) support for learning and literacy (e.g., Arnold, Lonigan, Whitehurst, & Epstein, 1994; Christenson & Sheridan, 2001; Espinosa, 2002; McCoy, 1996; Whitehurst, Arnold et al., 1994). For example, maternal sensitivity, responsivity, and cognitive stimulation throughout the first three years have been shown to enhance young children's socioemotional and cognitive development (NICHD Early Child Care Research Network, 2002). In addition, supportive home learning environments have been linked to specific school readiness behaviors, such as independence, creativity, and curiosity (Lamb-Parker, Boak, Griffin, Ripple, & Peay, 1999). Although these parenting behaviors may be important during other stages of development as well, they are especially critical during this phase. A comprehensive model underlying the relationship between these specific parenting behaviors (i.e., warmth and sensitivity, support for autonomy, and support for learning and literacy) and parental self-efficacy, as well as variables affecting this relationship is needed.

Using Bandura's social cognitive theory as a guide, the purpose of this study was to test the protective influence of self-efficacy against stress and depression for families of young children living in socioeconomic disadvantage. Specifically, structural equation modeling

(SEM) was conducted to determine the fit of a model suggesting that parental self-efficacy mediates the relationship between parental stress and depression and specific parenting behavior constructs (i.e., warmth and sensitivity, support for autonomy, and support for learning and literacy). To do this, first, the direct effects of parental stress and depression on parents' warmth and sensitivity, support for autonomy, and support for learning and literacy were tested. Second, the mediating role of parental self-efficacy was tested against the direct effects of parental stress and depression and each parenting behavior domain separately. Third, a global model of fit was conducted to determine if the presumed mediative relationships persisted in a multivariate model. See Figure 2 for representation of the mediational model. The following questions were addressed in this study:

1. To what degree does parental stress have a direct effect on parental warmth and sensitivity?
2. To what degree does parental stress have a direct effect on parental support for autonomy?
3. To what degree does parental stress have a direct effect on parental support for learning and literacy?
4. To what degree does maternal depression have a direct effect on parental warmth and sensitivity?
5. To what degree does maternal depression have a direct effect on parental support for autonomy?
6. To what degree does maternal depression have a direct effect on parental support for learning and literacy?

7. To what degree does parental self-efficacy mediate the relationship between parental stress and depression and the parenting behavior constructs in the mediational model?

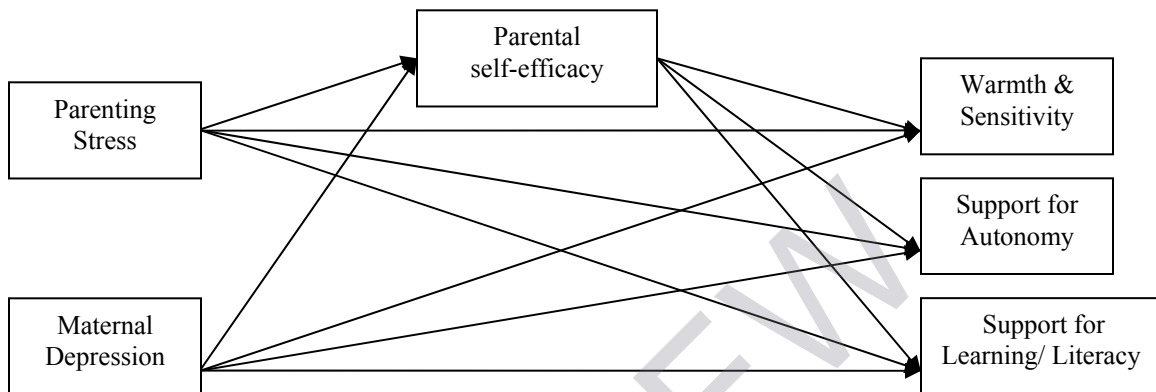


Figure 2. Mediational model

CHAPTER 2

Review of Literature

The overall objective of this study was to investigate the possible protective influence of parental self-efficacy against adversity experienced by parents of low-income. This was done through a path analysis of the direct effects of stress and depression and specific parenting behavior domains (i.e., warmth and sensitivity, support for autonomy, and support for learning and literacy) and the mediational role of parental self-efficacy. The purpose of this chapter is to review the current literature regarding the specific pathway of the mediational role of self-efficacy between stress and depression and parenting behavior, further review of the literature related to poverty and child outcomes will not be reviewed. The following sections will discuss literature related to (a) parental stress and depression for parents with low-income and (b) parental self-efficacy as a protective factor. The next section reviews the current literature regarding the effects of stress on parenting behavior.

Parental Stress

The financial strain experienced by some parents of low socioeconomic status can cause great stress. Difficulties meeting basic physical needs can place an enormous burden on parents who have limited resources and support (Belle, 1990). Several studies have indicated that adverse economic conditions (i.e., low-income, high debt relative to assets, job disruptions, or income loss) negatively affect individual levels of stress and family relationships through the daily strains they place on the family (e.g., Conger et al., 1992, 1993; Elder, Conger, Foster, & Ardel, 1992; Flanagan, 1990; Kessler, Turner, & House, 1988; Simons, Lorenz, Conger, & Wu, 1992; Voydanoff & Donnelly, 1988). Parents experiencing emotional distress due to their financial situations may have fewer emotional reserves to handle the daily stressors related to

parenting and in turn have more negative interactions with their children (Garbarino, 1976; McLoyd, 1990; McLoyd & Wilson, 1991).

McLoyd (1990) examined the impact of poverty on parenting behavior through a meta-analysis of current research conducted with African-American families. The purpose of the review was to demonstrate the research support for a person-process-context model espoused by Bronfenbrenner (1986). McLoyd suggests that the impact of economic hardship on the family is mediated by the personal characteristics of the family members. The major assumptions of this model that have been supported by research include: (a) the capacity for supportive, consistent, and involved parenting is diminished as a result of poverty and economic loss, rendering parents more vulnerable to negative life events; (b) psychological distress serves as a critical mediator between economic hardship and parenting behavior; and (c) children's socioemotional functioning is adversely affected by economic hardship in part through its influence on parenting behaviors. These findings further demonstrate the important mediative role of stress in the relationship between parenting behaviors and child outcomes for families living in poverty.

In a recent study, Middlemiss (2003) examined the relationship between poverty, stress, and parenting style for both black and white mothers. A sample of thirty mothers from each racial category with daughters between 3 to 5 years of age completed measures assessing levels of stress and support. Parenting style was assessed via the Parental Philosophy Interview (PPI) that was developed for the study to identify mothers' perceptions of their parenting responses in hypothetical situations (i.e., disciplinary and instructional), as well as to ask them to describe their actual behaviors in similar situations. This interview assessed parents' reports along four categories of parenting behaviors: (a) authoritative; (b) communicative/directive; (c) authoritarian; and (d) permissive. Differences in mother's rated response were determined via

repeated measures ANOVA and differences in mothers' self-reported descriptions of behavior were determined through chi-square analyses.

Findings demonstrated that both groups of mothers experienced high levels of stress, as well as low levels of support. Additionally, both groups reported using similar types of behaviors, indicating there was no racial/cultural difference. However, both groups in this study reported using less authoritarian behavior than had groups in previous studies (e.g., McLoyd, 1998). This finding may be a function of the use of self-report measures to assess parenting behavior. The possibility of social bias in self-reports suggests that parents may be more inclined to report more socially accepted parenting styles (i.e., authoritative), rather than their true parental practices. One way of rectifying this limitation is to include independent observations of parent-child interactions, rather than relying on self-report. In light of this limitation, however, this study reinforces the association between low income and stress experienced by parents living in poverty.

Such findings support the notion that stress plays an important role in the lives of families suffering from financial hardship. Not only do these families suffer from economic strain due to low-income, but from psychological distress that taps their emotional reserves to combat their daily pressures. Increased stress levels pose an indirect threat for negative child outcomes due to the use of less positive parenting strategies. Therefore, research and intervention efforts looking to address the effects of socioeconomic disadvantage for families must take into account the influence of stress and the possible risk that it imposes on family well-being.

Another important variable that should be considered for parents of low-income is maternal depression. The following section reviews the current literature regarding the effects of maternal depression on parenting behavior and adverse outcomes for children.

Maternal Depression

Maternal depression is associated with many adverse outcomes for children, such as language and cognitive difficulties (Cogill, Caplan, Alexandra, Borson, & Kumar, 1986; Lyons-Ruth, Connell, Grunebaum, & Botein, 1990; Murray, 1992; Murray, Fiori-Cowley, Hooper, & Cooper, 1996), insecure attachments (Lyons-Ruth, Connell, Zoll, & Stahl, 1987; Murray, 1992; Teti, Gelfand, Messinger, & Isabella, 1995), difficult social interactions (Campbell & Cohn, 1991; Field, 1995; Stein et al., 1991), and behavioral issues (Murray, 1992). For example, Lyons-Ruth, Zoll, Connell, and Grunebaum (1986) found that increased levels of depression in mothers were significantly associated with poorer infant motor and mental development at one year of age. This relationship still held true even after controlling for maternal IQ levels.

Additionally, depressed mothers have been shown to display less positive parenting behaviors than non-depressed mothers. In relation to mothers who are not depressed, parenting behaviors of depressed mothers have been characterized as (a) avoidant of confrontation; (b) less active, competent, and responsive; and (c) more hostile, helpless, intrusive, critical, and disorganized (Gelfand & Teti, 1990; Goodman, 1992; Murray, 1997; Murray & Cooper, 1997; Webster-Stratton & Hammond, 1988).

Leiferman (2002) examined the relationship between maternal depression and parenting behaviors that are associated with children's health (i.e., smoking, administering vitamins to the child, and placing the child in a car seat). Data from a nationally representative sample of 8,145 mothers who took part in the National Maternal and Infant Health Survey (NMIHS) in 1988 and the NMIHS Longitudinal Follow-up Survey (NMIHS-LF) in 1991 were used in this investigation. Logistic regression modeling of maternal depression scores assessed with the Center for Epidemiologic Studies Depression Scale (CES-D Scale; Radloff, 1977) and self-