

Risk and Protective Factors Among  
Low-Income Urban Mothers and Fathers in the Philippines  
by  
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## **DEDICATION**

To Dad and Kuya.

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## **ABSTRACT**

Poor and low-income families constitute more than half of the household population in the Philippines, and contend with several risks that may compromise parents' well-being and ability to parent their children effectively. How do poverty-related risks influence Filipino parents, and what are the culturally-relevant factors that promote resilience in this context? To answer these questions, this study examined multidimensional risk and protective factors that contribute to the psychological well-being and parenting behaviors of low-income urban Filipino mothers and fathers. Structured interviews using self-report questionnaires were conducted with 116 mothers and 84 fathers of adolescents from 119 families in three low-income neighborhoods in Manila, Philippines. Mediation analyses showed that neighborhood disorder was associated with rejecting parental behaviors via depressive symptoms for mothers and via general stress for fathers. In addition for fathers, poor living conditions were associated with lower levels of warm parenting through stress. Results from moderation analyses revealed that religiosity reduced the association between community violence exposure and maternal distress (depression, anxiety, and general stress), thereby serving as a protective factor. Neighborhood cohesion was also a protective factor that reduced the association between poor living conditions and paternal distress. Familism did not serve as a protective factor, and instead amplified the negative effect of neighborhood disorder on rejecting behaviors for fathers. Results highlight contextually-relevant risk and protective factors for mothers' and fathers' well-being and parenting behaviors, and offer theoretical, practical, and policy-related applications for improving parents' functioning in a developing country.

## **CHAPTER I**

### **Introduction**

Studies have shown that the confluence of stressors associated with poverty compromises parental well-being and parenting behaviors, and that poor parental well-being and parenting, in turn, negatively affect child outcomes (Ceballo & McLoyd, 2002; Conger, Conger, & Martin, 2010). Whereas the negative effects of poverty on families and children have been studied extensively, researchers have devoted relatively less attention to the factors and processes that buffer the effects of poverty on parents' and children's functioning. As a result, we know more about deficits and maladaptation than we know about the strengths and assets that can protect families with disadvantaged backgrounds (Cabrera, 2013; McLoyd, Mistry, & Hardaway, 2013).

The need to expand research on protective factors in the context of poverty is accompanied by an even more compelling need to investigate these processes outside Western industrialized regions. Recently, scholars have called attention to the severe underrepresentation of developing countries in psychological research in general (Arnett, 2008; Henrich, Heine, & Norenzayan, 2010) and developmental science in particular (Bornstein et al., 2012). The lack of research on developing countries is concerning, given that children and families in these regions experience a broader range of deprivations beyond income poverty, including lack of access to food, water, sanitation facilities, health care, shelter, education, information, and basic social services (Gordon, Nandy, Pantazis, Pemberton, & Townsend, 2003). As poverty in developing countries is multidimensional (Alkire & Santos, 2014; Minujin, Delamonica, Davidziuk, &

Gonzalez, 2006), more research is needed to understand how contextual risk factors beyond income affect families and children in these regions.

In the Philippines, little systematic research has been done on how contextual poverty-related risks affect parents and children, and the factors that might buffer their negative effects. This is a cause for concern, given the contextual stressors associated with urban poverty in the Philippines. In Metro Manila, the urban capital, about 1.8 million households are considered poor and another 8.7 million households are low-income. (Albert & Raymundo, 2015). About 20 percent of Metro Manila's population reside in informal settlements (United Nations Children's Fund, 2010), and families in these areas confront several stressors in their physical environment, such as residence in makeshift dwellings, inadequate sanitation and drainage, limited access to clean water, overcrowding, and other threats to physical health (Racelis & Aguirre, 2002). Residents in informal settlements may also face stigma, housing insecurity, and eviction threats, and are at risk of exposure to violence and dangers due to crime, drug use, and neighborhood gangs (Racelis & Aguirre, 2002; Racelis, Aguirre, Alampay, Etemadi, & Fernandez, 2005).

Apart from studying the effects of contextual poverty-related risks on Filipino families, it is important to consider the effects of these risk factors on parents of adolescents, specifically. As children transition into adolescence, they experience dramatic biological and psychosocial changes (Steinberg & Morris, 2001); therefore, cumulative exposure to physical and psychosocial stressors associated with poverty during this period may have greater negative implications for their development (Evans, Kim, Ting, Tesher, & Shannis, 2007). In addition, adolescents have greater opportunities to be exposed to neighborhood risks outside the home (Kroneman, Loeber, & Hipwell, 2004), and have a more sophisticated understanding of the meanings and implications of being socioeconomically disadvantaged (McLoyd et al., 2009). It

is therefore important to understand how poor parents manage risks, communicate, and interact with their children during this developmental period. Although studies on Filipino parenting and adolescent development have increased in the past years (e.g., Bernardo, 2010; Hindin, 2005), virtually absent is a focus on parenting of adolescents in low-income Filipino families.

This dissertation will address gaps in the literature by (a) examining links between contextual poverty-related risks, parents' psychological well-being, and parenting behaviors; (b) identifying culturally-relevant individual, familial, and community-level protective factors against poverty-related risks; and (c) investigating differences in the foregoing relations between mothers and fathers of adolescents residing in poor urban neighborhoods in the Philippines.

### **Conceptual Framework**

This dissertation incorporates indigenous perspectives with family stress and resilience frameworks. The *family stress model* suggests that socioeconomic stressors negatively influence parents' behaviors and children's subsequent outcomes by increasing parents' psychological distress (Conger et al., 2010; Conger, Ge, Elder, Lorenz, & Simons, 1994; McLoyd, 1990). The model posits that poor socioeconomic conditions place considerable economic pressure and strain on parents, increasing the risk of emotional distress and marital conflict, which in turn leads to harsh, non-nurturing, and uninvolved parenting, and consequently, negative outcomes for children. The family stress model has been empirically supported by a large number of studies that examined the effects of socioeconomic disadvantage across a wide range of family structures and cultural backgrounds in the United States (Conger et al., 2010), but has not been tested with Filipino families. Indigenous frameworks such as Carandang's (1987) family systems perspective and Decenteceo's (1999) *pagdadala* (burden-bearing) model similarly acknowledge the negative implications that parental stresses or burdens may have on the

functioning of Filipino families. Among Filipino parents, the family is an important *dinadala* (burden), because as parents, they are expected to “carry the family” toward a path leading to good health, security, and well-being (Decenteceo, 1999). Although the word “burden-bearing” has a negative connotation in the English language, the concept of *pagdadalaga* adopts a strengths-based perspective that highlights sources of support that are critical for daily survival. In situations when burdens become especially taxing, Filipinos do not carry burdens alone, and rely heavily on their family and community for support (Carandang, 1987; Decenteceo, 1999).

These indigenous perspectives are consistent with resilience and strengths-based frameworks that highlight positive adaptation despite exposure to risk (Luthar, Cicchetti, & Becker, 2000; Rutter, 1987). In the *risk and protection* framework, risk factors increase individuals’ vulnerability to experiencing negative outcomes, whereas protective factors moderate or modify a person’s response to risk in the form of amelioration or reduction of the effects of risk (Fergus & Zimmerman, 2005; Rutter, 1987). Different types of protective effects include (a) protective-stabilizing, in which the protective factor confers stability despite increasing levels of risk; (b) protective-enhancing, in which the protective factor increases positive outcomes with increasing risk; and (c) protective-reactive, in which the protective factor confers advantages but has a diminished effect at high risk levels (Luthar et al., 2000).

Synthesizing the foregoing frameworks and models, this dissertation investigates risk and protective factors that are related to low-income urban Filipino parents’ psychological well-being and parenting. Beyond simply examining income deprivation as a risk factor, this study conceptualizes contextual risk factors as including poor living conditions, neighborhood disorder, and community violence exposure. As depicted in Figure 1, the initial goal of this study is to investigate the direct and indirect associations of these risk conditions with Filipino

parents' psychological well-being and parenting behaviors, after accounting for family income. As presented in Figure 2, another goal is to examine protective processes that moderate the relation between the contextual risks associated with poverty and Filipino parents' psychological well-being and parenting behaviors. This study investigates culturally-relevant protective factors at multiple levels in a Filipino parent's ecological context; specifically, the individual (religiosity), family (familism values and behaviors), and community (neighborhood cohesion).

### **Poverty, Psychological Well-Being, and Parenting**

#### **Poverty and Parents' Psychological Well-Being**

Using the family stress model as an overarching framework, several studies in the US have found that one mechanism through which economic hardship is associated with poorer parenting practices is by increasing psychological distress among parents of children and adolescents (Conger & Conger, 2002; Gutman, McLoyd, & Tokoyawa, 2005; Iruka, LaForett, & Odom, 2012; Landers-Potts et al., 2015; Vandewater & Lansford, 2005; White, Roosa, Weaver, & Nair, 2009). Indeed, poverty has been consistently associated with mental health problems, especially among women (Belle & Doucet, 2003; Siefert, Finlayson, Williams, Delva, & Ismail, 2007). A review of research on the mental health of low-income women receiving welfare in the US reported high levels of depression in this population, with prevalence rates ranging from 12% to 36% for major depressive disorder and 25% to 57% of the samples having depressive symptom scores that are of clinical significance (Lennon, Blome, & English, 2002). Other studies revealed that acute material resource loss is associated with depressive mood (Ennis, Hobfoll, & Schro, 2000), and that the poorest mothers had higher odds of being classified as having generalized anxiety disorder (Baer, Kim, & Wilkenfeld, 2012). Whereas these findings indicate higher levels of mental health disorders among poor individuals, researchers caution

against considering these symptoms as psychiatric, as they are usually not pathological but a reaction to environmental stressors (Baer et al., 2012).

What is it about poverty and economic hardship that undermines parents' mental health? Researchers posit that poverty is not a singular risk factor, but that it is characterized by multiple physical and psychosocial stressors that cumulatively influence socioemotional functioning (Belle & Doucet, 2003; Evans, 2004; Siefert et al., 2007). Beyond experiencing financial strain, low-income families are likely to be situated in poor quality housing units, with some of these areas being exposed to pollution, allergens, and toxic substances such as lead (Evans, 2004). Poor physical and living conditions may have negative implications for mental health by reducing a sense of security and control over surroundings, increasing anxiety and concerns about structural hazards and maintenance, and lowering self-esteem (Evans, Wells, & Moch, 2003). Indeed, studies have found that housing problems and poor living conditions are associated with depressive symptomatology in samples of predominantly African American low-income parents (Jocson & McLoyd, 2015; Siefert et al., 2007).

Another contextual risk that co-occurs with poverty is residence in disordered neighborhoods. Daily exposure to physical and social disorder within high-poverty neighborhoods imposes chronic stress on residents, thereby increasing their vulnerability to psychological problems (Cutrona, Wallace, & Wesner, 2006). Disorder also serves as a cue that signals the potential for harm in the community, and may prompt feelings of powerlessness, mistrust, and isolation among residents (Ross & Mirowsky, 2009). Indeed, neighborhood disorder, indicated by conditions such as graffiti, noise, public drinking, and dirty streets, has been linked to higher levels of anxiety, anger, and depression among adults (Jocson & McLoyd, 2015; Ross & Mirowsky, 2009). Perceived disorder in the neighborhood has also been

associated with both psychological and physiological stress among a sample of mostly African American and Latina low-income urban mothers (Hill, Ross, & Angel, 2005), and higher parenting stress among low-income African American mothers (Lamis, Wilson, Tarantino, Lansford, & Kaslow, 2014).

Lastly, poor individuals are at risk of exposure to community violence. Community violence consists of actions that are intended to cause physical harm against people in the community (Foster & Brooks-Gunn, 2009) and includes personal victimization, such as being attacked with a knife, and witnessing violent events such as seeing someone get shot (Brennan, Molnar, & Earls, 2007). Most of the research on community violence exposure has focused primarily on its influence on youth, and these studies show that the psychological effects of community violence are strongest on symptoms of posttraumatic stress disorder (PTSD), with smaller effects on other internalizing symptoms (Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009). Few studies have investigated the influence of community violence on parents and family processes (Cooley-Strickland et al., 2009); however, some evidence indicates that community violence exposure is also associated with depressive symptoms among mothers (Jocson, Ceballo, Alers-Rojas, & Cranford, under review; Mitchell et al., 2010) and with PTSD, depression, and anxiety symptoms among poor Latina mothers (Aisenberg, 2001). In addition, perceived neighborhood danger has been associated with higher levels of depressive symptoms among Mexican American fathers (White et al., 2009) and low-income African American mothers (Kotchick, Dorsey, & Heller, 2005).

Researchers have extended the family stress model to examine neighborhood stressors as aspects of socioeconomic disadvantage that may relate to parents' psychological well-being and parenting behaviors. For example, neighborhood stress (Gutman et al., 2005), neighborhood

danger (Kotchick et al., 2005; White et al., 2009), neighborhood and housing disorder (Jocson & McLoyd, 2015), and community violence exposure (Mitchell et al., 2010) have been indirectly associated with poorer parent-child relationship quality, decreased warmth, and increased use of harsh and inconsistent parenting strategies through parents' psychological distress.

### **Poverty and Parenting**

The family stress model posits that parents' psychological well-being mediates the relation between poverty and parenting behaviors. Evidence suggests that contextual poverty-related risks may also have direct effects on parenting practices. For example, neighborhood danger has been associated with less warm parenting in mothers and fathers (Gonzales et al., 2011; White, Liu, Nair, & Tein, 2015). Community violence exposure has also been linked with higher use of verbal threats and physical punishment among mothers (Zhang & Anderson, 2010; Zhang & Eamon, 2011). These results suggest that parenting is compromised when parents experience the demands of residing in dangerous neighborhoods.

While some researchers typically assume that high warmth and low harshness are optimal strategies facilitating children's development, other scholars suggest that strict and restrictive parenting strategies may be an adaptive parental response to protect children from danger in high-risk neighborhoods. This is consistent with the argument that the characteristics and demands associated with different environmental contexts shape the strategies that parents use with their children (Pinderhughes, Nix, Foster, Jones, & The Conduct Problems Prevention Research Group, 2001). In his ethnographic work, Furstenberg (1993) described the "social paranoia" that some parents develop in drug-ridden and high-crime neighborhoods, leading them to exert strict control and monitoring to isolate their children from their neighborhood. As found in other studies, lower maternal perceptions of neighborhood safety were associated with more

hostile control among a socioeconomically diverse sample of African American and European American mothers (Hill & Herman-Stahl, 2002). Likewise, African American and Latino parents whose families were randomly selected to move from a low-income neighborhood to a middle-class community reported engaging in less stringent monitoring and less frequent harsh discipline compared to those parents who stayed in impoverished neighborhoods (Fauth, Leventhal, & Brooks-Gunn, 2007). Although the risks associated with poor neighborhoods could make it challenging for parents to be less restrictive in order to accommodate adolescents' increasing autonomy needs, researchers note that it may be possible to combine warmth and nurturance with appropriate, firm discipline (Cauce, Stewart, Rodriguez, Cochran, & Ginzler, 2003). For instance, a qualitative study found that poor Latina mothers combined strict monitoring with good communication to protect their children from neighborhood risks (Ceballo, Kennedy, Bregman, & Epstein-Ngo, 2012).

Parental monitoring or supervision may serve as a strategy that parents use to protect their children from neighborhood risks and community violence. Previous studies have linked parental monitoring with less exposure to violence (Gorman-Smith, Henry, & Tolan, 2004). To investigate protective effects, researchers have also examined parental monitoring as a moderator of the relation between neighborhood risk factors and parenting. For example, one study found that adolescents' exposure to neighborhood violence and disorder (e.g., seeing someone getting robbed, seeing someone drinking on the streets) was less likely to lead to early onset of substance use when adolescents reported high levels of parental supervision (Burlew et al., 2009). Other studies likewise found protective effects of parental monitoring and supervision on children's functioning, but only at low levels of community violence exposure (Ceballo, Ramirez, Hearn, & Maltese, 2003; Sullivan, Kung, & Farrell, 2004). In conditions of high

neighborhood risk, parents' ability to remain vigilant may be compromised because of the stress associated with living in chronically violent neighborhoods (Colder, Mott, Levy, & Flay, 2000).

Indeed, one study found that neighborhood risk factors were associated with less parental monitoring (Beyers, Bates, Pettit, & Dodge, 2003). In addition, exerting strict monitoring and direct control become more difficult as children enter adolescence (Furstenberg, 1993).

Communication is a significant challenge for parents and children during the adolescent years (Laursen & Collins, 2004), but has consistently been found to be a component of parent-child relationship quality that is associated with lower engagement in risk behaviors such as substance use (Pokhrel, Unger, Wagner, Ritt-Olson, & Sussman, 2008), sexual risk-taking (Huebner & Howell, 2003), and delinquency (Davalos, Chavez, & Guardiola, 2005). Research on parent-child communication in low-income families is limited. A study with low-income urban adolescents found that family dinner frequency is associated with adolescent perceptions of parent-child communication frequency (Fulkerson et al., 2010). The authors speculated that communicating during meals may serve a protective role for economically disadvantaged youth because it provides an opportunity for parents to monitor their children's activities, and because having daily routine conversations could foster feelings of family connectedness. As found in a qualitative study with poor Latina mothers, parent-child communication was the most widely endorsed parenting practice and was seen as an important aspect of parenting in high-crime neighborhoods (Ceballo et al., 2012). Another qualitative study found that poor African American mothers use communication as a strategy to support their children's educational endeavors (Gutman & McLoyd, 2000). In particular, parents of high-achieving students communicate with their children to encourage and praise them when they do well in school, and parents of low-achieving students talk to their children about how to prevent school problems.

## **Poverty, Parents' Psychological Well-Being, and Parenting in the Philippines**

The first goal of this dissertation is to examine the associations between contextual poverty-related risks and Filipino parents' psychological well-being and parenting while accounting for demographic characteristics such as family income (Figure 1). In the Philippines, the links between poverty, parent's psychological well-being, and parenting have not been examined as extensively as in the US. There is qualitative work suggesting that poor, Filipino mothers feel sad and distressed when financial difficulties prevent them from providing for their children's needs (Racelis et al., 2005). In another qualitative study, a majority of Filipino mothers living in low-income neighborhoods reported feeling scared and anxious for their child's well-being and their own well-being because of violence in the community (Jocson & Garcia, 2017). It is likely that other contextual risks, apart from neighborhood violence, may be related to parents' psychological health, although such potential relations between risks and psychological well-being have yet to be examined quantitatively using larger samples of Filipino parents. In addition, the extent to which links between poverty-related risks and Filipino parents' behaviors are mediated by parents' psychological well-being remains relatively unexamined and in need of greater attention.

Qualitative studies suggest that there are associations between contextual risks and parenting strategies among Filipino parents. One study found that the most frequently endorsed strategies mothers reported using to protect their children from community violence were giving reprimands and advice, as well as monitoring and rule-setting. In particular, the majority of mothers reported explaining dangers and communicating strategies to avoid neighborhood dangers, routinely asking about children's activities or asking other people about their children's activities, going out to search for their child if their whereabouts are unknown, and imposing

rules for tight supervision (Jocson & Garcia, 2017). These findings are in keeping with Ochoa's (2014) qualitative results in which poor Filipino mothers engage in consistent monitoring of their children to protect against neighborhood danger, along with other non-punitive (e.g., instruction, correction, modeling) and punitive (e.g., threatening, corporal punishment) strategies to promote good behavior.

Quantitative investigations of the relations between poverty and Filipino parenting are scarce, although there is evidence that lower levels of parental education (an indicator of socioeconomic status) are associated with more frequent use of corporal punishment among Filipino mothers and fathers (Jocson, Alampay, & Lansford, 2012). Additionally, experiences of stressful life events predict hostility and aggression among Filipino fathers (Garcia & Alampay, 2012). However, a recent multi-country study found no significant relation between neighborhood danger and harsh parenting in the Philippines (Skinner et al., 2014).

Whereas the relations between poverty, psychological well-being, and parenting among Filipino parents may be similar to those observed among poor US parents, differences may be expected given the considerable contextual variations between the environment of low-income families in the US versus developing countries like the Philippines. In particular, the nature of poverty in developing regions is characterized by a broader range and severity of physical and psychosocial risks than just income poverty (Alkire & Santos, 2014; Britto et al., 2017; Gordon et al., 2003; Minujin et al., 2006). In a review of 115 studies on common mental disorders in 33 low- and middle-income countries, the poverty indicators most consistently associated with common mental disorders were education, food insecurity, housing and living environment, and financial stress. Interestingly, income, employment, and consumption were not as strongly nor consistently associated with mental health, suggesting that relative poverty may be a stronger

predictor of mental health status in these samples than absolute poverty (Lund et al., 2010).

Another review identified qualities that should be considered when examining the links between poverty and mental health in developing countries, such as economic deprivation, malnutrition, low education, gender disadvantage, and conflict and disasters (Patel, 2007).

Among Filipinos, notable contextual risks associated with poverty include poor living conditions, neighborhood disorder, and community violence. In one qualitative study, mothers reported difficulties with their living conditions, such as not having enough food, lack of electricity, inadequate sanitation facilities, and unstable or poorly built shelters that break down during typhoons. In addition to these risks, mothers typically mentioned street fights, unsupervised youth (*tambay*), drinking and gambling sessions among adults, and drugs and violence as things that they dislike in their neighborhoods (Jocson & Garcia, 2017). In sum, there is empirical evidence suggesting that contextual poverty-related risks are associated with parental psychological distress and the use of certain parenting strategies among Filipino parents. This dissertation examines these relations and extends previous findings by investigating multidimensional contextual risks found in a low-income urban Filipino setting.

### **Identifying Protective Factors Against Poverty-Related Risks**

The second goal of this dissertation is to examine individual, familial, and community-level factors that moderate the association between poverty-related risks and Filipino parents' psychological well-being and between poverty-related risks and parenting strategies (Figure 2). Risk-protective frameworks have been used in studies focusing on early child development and adolescent health in developing countries (Mmari & Blum, 2009; Walker et al., 2011), but few studies have examined the risk and protective mechanisms pertaining to parents' psychological well-being and parenting in non-Western contexts. Incorporating indigenous perspectives, this

dissertation examines culturally-relevant protective factors among low-income Filipino parents, in particular, religiosity, familism, and neighborhood cohesion (Carandang, 1987; Decenteceo, 1999).

### **Individual Factor: Religiosity**

Religiosity has been defined as an outward expression of spirituality (Gill, Barrio Minton, & Myers, 2010) and the degree to which individuals follow the prescribed beliefs and practices of an organized religion (P. C. Hill & Pargament, 2008; Mattis, 2002). Qualitative work in the US suggests that religion and spirituality help African American women cope and construct meaning in times of adversity by helping them maintain grace and strength to keep themselves “whole” after adverse events left them feeling fragmented (Mattis, 2002). Contrary to views asserting that relying on religion is passive and escapist, religious and spiritual coping may function by helping women discern life lessons and construct meaning from distressing experiences. Mattis (2002) further noted that women seemed to interpret these negative experiences as “tests of character” through which they can manifest the authenticity and depth of their religious/spiritual convictions and maturity.

Other studies with American samples document similar protective functions of religiosity/spirituality among individuals living in poverty. For example, spirituality and religiosity were associated with holistic functioning (e.g., creativity, coping, identity, social and physical wellness) among women in a low-income rural setting (Gill et al., 2010). Another study found that spiritual existential well-being (sense of purpose and meaning in life) and religious well-being (spiritual life in relation to God) were related to lower levels of parenting stress among low-income African American mothers (Lamis et al., 2014). A benefit of religion is that it is available to anyone at any time (Koenig, 2009), making it accessible to individuals who

might not have the financial and social capital needed to access other coping resources. Religion may also help low-income individuals adopt an optimistic and hopeful explanatory style when interpreting negative events (Koenig, 2009; Seybold & Hill, 2001), although other researchers argue that various aspects of religiosity and spirituality may be related to optimism in different ways. For example, a study with African American individuals found that traditional indices of religiosity (e.g., church attendance, church involvement) were not related to optimism; however, subjective spirituality and perceptions of having a loving and supportive relationship with God were positively associated with optimism (Mattis, Fontenot, & Hatcher-Kay, 2003).

Although religion and spirituality offer many coping benefits, studies of their effects on well-being and behaviors yielded results that are not uniformly positive. For instance, religion has been associated with authoritarianism, rigidity and dogmatism, and such unhealthy adherence to religion has been linked to negative behaviors such as child abuse and neglect, intergroup conflict, and violence (Seybold & Hill, 2001). Conservative religious beliefs in the instrumental benefits of corporal punishment have also been associated with more frequent use of corporal punishment among mothers and fathers of young children (Gershoff, Holden, Miller, & Holden, 1999). In addition, whereas Lamis et al. (2014) found that spirituality (measured as existential and religious well-being) was related to lower levels of parenting stress, existential well-being also intensified the link between neighborhood disorder and parenting stress. That is, mothers who reported average or high levels of existential well-being were more strongly distressed by higher levels of neighborhood disorder compared to mothers who reported low existential well-being. In this case, having a higher sense of spirituality may have increased parents' awareness and sense of responsibility in ensuring that their children are protected in a highly disordered environment, and therefore elevated their distress (Lamis et al., 2014).

Religiosity may play an important role among Filipino parents living in poverty, given the cultural significance of religion among Filipinos. The Philippines has the unique status of being the only predominantly Christian country in Asia, with 91.5% of the population identifying as Christian (Goh, 2004). Roman Catholicism dominates as the primary Christian religion practiced by Filipinos. In 2010, there were about 75 million Catholics—roughly 81% of the population (Pew Research Center, 2011; Philippine Statistics Authority, 2016b). Thus, Catholic beliefs and practices are deeply entrenched in Philippine society, even having a considerable influence on government policies and laws pertaining to issues such as reproductive health and divorce (Ruiz Austria, 2004). In a study with Filipino adolescents, one of the most highly endorsed value clusters included *maka-Diyos* (piety), and related values such as fear of God, faith in God, and love of God (Clemente et al., 2008). Qualitative evidence suggests that poor Filipino adults cope with poverty by praying and trusting that God will help them through difficult times (Tuason, 2011). In another study, about half of 20 low-income Filipino mothers reported using prayers frequently to protect themselves and their children from the harmful effects of community violence exposure, and the majority of participants (90%) considered religion as “fairly” and “very” important in their home (Jocson & Garcia, 2017). However, the extent to which religiosity/spirituality serves as a moderator of the relations between poverty-related risks, psychological well-being, and parenting behaviors among Filipino parents has not been studied.

### **Familial Factor: Familism**

Familism is a cultural value that entails having a strong sense of family unity and loyalty, prioritizing the welfare of immediate and extended family over personal needs, and relying on family members for instrumental and social support (Gaines et al., 1997; Kennedy & Ceballo,

2013; Stein et al., 2014). Evidence for the protective role of familistic values in the context of disadvantage have mostly been found among Latinos, an ethnic group described as having strong adherence to values emphasizing family orientation (i.e., *familismo*) (Calzada, Tamis-LeMonda, & Yoshikawa, 2013; Halgunseth, Ispa, & Rudy, 2006). A longitudinal investigation showed that Mexican-origin mothers' familism value orientation (measured as familial obligations) was protective in the relation between economic pressure and parental warmth toward adolescents (White et al., 2015). An interesting finding from the same study showed that at high levels of maternal familism, neighborhood danger predicted *increases* in harsh strategies, suggesting that harsh parenting may be a practice that highly familistic mothers consider to be contextually relevant and beneficial in the context of dangerous communities (White et al., 2015). With regard to psychological well-being, *familismo* has been reported as protective against community violence exposure among Latino adolescents by mitigating the relation between victimization and depressive symptoms (Kennedy & Ceballo, 2013).

Scholars recognize the applicability of *familismo* to other cultures with interdependent family orientations (Schwartz, 2007) Similar to Latinos, Filipinos are often described as adhering to familistic values emphasizing cohesiveness among immediate family members and extended relatives, respect for elders and parental authority, and mutual obligations (Alampay, 2014; Alampay & Jocson, 2011; Chao & Tseng, 2002; Fuligni & Pedersen, 2002; Lacar, 1995; Medina, 2001). In a previous study, Filipino American parents reported higher endorsement of familism values (indicated by respect for adults, caring for aging parents, centrality of family, parental expectation of family obligation, and family harmony and sacrifice) compared to Korean American parents (Choi, Kim, Noh, Lee, & Takeuchi, 2017). Similarly, in a study of daily family interactions in the United States, young Filipino American adults reported higher levels of family

importance and connectedness compared to those from Latino, East Asian, and European backgrounds (Fuligni & Masten, 2010). Reciprocity of support among family members is reflected through Filipino cultural norms, such as children taking care of their elderly parents and parents extending support to their children through young adulthood or even beyond. In recent years, economic trends such as parental migration (i.e., when parents leave their children indefinitely to work overseas) have led to changes in family structure, role, and dynamics (Parreñas, 2006; Raymundo & Cruz, 2004). These changes, in turn, have an impact on prevailing attitudes and views about the family. Indeed, the 1996 and 2001 World Values Survey reveal differences in beliefs and attitudes among certain groups in the Philippines (Morillo, Capuno, & Mendoza, 2013). For example, the belief in marriage as an institution was lower among urban compared to rural residents; the view that a woman needs to have a child was less endorsed by more highly educated individuals than those less educated; and absolute love for parents was less endorsed by employed compared to unemployed individuals. Despite differences in attitudes about marriage and family, Filipinos' adherence to familistic values appears to be generally strong. Results from the same study showed that despite within-group differences in endorsement of absolute love for parents, more than 90% of all respondents agreed that parents must be loved and respected regardless of their qualities and faults. Likewise, the most shared value among all demographic groups is that having both a mother and father is critical to childrearing (Morillo et al., 2013).

Familism may thus serve a buffering role among low-income Filipino parents. Qualitative work shows that poor Filipino individuals express a high level of commitment to helping their families of origin, even when they themselves have little to give, and that this strong family orientation enhances their sense of security and support during times of difficulty

(Tuason, 2011). A small percentage of poor Filipino mothers (35%) in a qualitative study reported engaging in family activities (e.g., sharing meals, going out) and relying on family to cope with economic and neighborhood stressors, including financial difficulty and community violence (Jocson & Garcia, 2017). However, no known study has quantitatively examined the potentially protective role of familism among low-income Filipinos.

### **Community Factor: Neighborhood Cohesion**

Western literature characterizes poor neighborhoods as beset with structural disadvantages, weak institutional controls, and high levels of violence and crimes (Leventhal & Brooks-Gunn, 2000; Murry, Berkel, Gaylord-Harden, Copeland-Linder, & Nation, 2011; Sampson, Raudenbush, & Earls, 1997). Such characteristics arguably bring about social disorganization, mistrust, and low cohesion among residents (Gapen et al., 2011; Ross & Mirowsky, 2009; Ross, Mirowsky, & Pribesh, 2001; Sampson et al., 1997). Moreover, although poor individuals establish social networks in low-income communities, studies in the US show that having these relationships might be more problematic than helpful (Belle & Doucet, 2003). For instance, poor African American parents who reported knowing few neighbors in their community reported lower rates of internalizing problems for their children compared to parents who reported knowing many neighbors (Caughy, O'Campo, & Muntaner, 2003). In another study with low-income African American mothers, problematic social ties were associated with lower psychological well-being, whereas supportive social ties were not associated with enhanced well-being (Todd & Worell, 2000). Belle and Doucet (2003) proposed a number of reasons why social networks in poor communities may promote stress for individuals: (a) network members are also likely to be poor and stressed; (b) reciprocating help received may be time-consuming; and (c) it is more difficult for poor mothers to remove themselves from

stressful relationships, especially when they rely on these networks for things they cannot afford, such as child care.

Similar experiences may apply to low-income Filipino parents; however, unique cultural orientations espoused within Filipino communities may result in having neighborhood cohesion serve a protective function. Filipinos' familistic orientation extends to people in local communities and neighborhoods. Children typically refer to elders outside their homes as *ate/kuya* (older sister/older brother), *tita/tito* (aunt/uncle), or *lola/lolo* (grandmother/grandfather), regardless of kinship status (Morillo et al., 2013; Nadal, 2004). The use of kin names for neighbors is reflective of a core Filipino cultural value called *kapwa*, which refers to the unity of self with others, or having a shared identity with others (Enriquez, 1994). This unique characterization of Filipino community members as extended family is one of the ways *kapwa* can be distinguished from the typical notions of collectivism (Nadal, 2004).

It is therefore not uncommon for Filipinos to rely on their neighbors for support, and this practice is observed even in low-income communities. A study of poor Filipinos found that neighbors serve as important coping resources, even providing financial support in times of difficulty (Tuason, 2011). Poor Filipino mothers rely on neighbors for parenting, financial, and emotional support, as well as for support during medical emergencies and for other basic needs (Jocson & Garcia, 2017). However, several mothers acknowledged that neighbors are also a source of stress, suggesting that the protective role of neighborhood social cohesion may be limited. As with the other hypothesized protective factors of interest in this study, no known previous research has examined the role of neighborhood social cohesion as a moderator of relations between poverty-related risks, psychological well-being, and parenting strategies.

## **Differences Between Filipino Mothers and Fathers**

The third goal of this study is to examine whether the associations between contextual poverty-related risks, psychological well-being, parenting, and protective factors differ between Filipino mothers and fathers. The existing literature on Filipino parenting describes differentiated traditional gender roles for mothers and fathers, with mothers as the primary caregiver responsible for managing children's daily routines, and fathers providing for the family and having a more limited role in child rearing (Alampay, 2014; Enrile & Agbayani, 2007; Liwag, de la Cruz, & Macapagal, 1998; Tan, 1994). Filipino mothers are more visible in several aspects of adolescents' daily routines, including meals, chores, and leisure activities (McCann-Erickson Philippines, 2006), and not surprisingly, then, more Filipino adolescents report being closer to their mothers than their fathers (Hindin, 2005). Among low-income families, mothers may feel the need to work in order to augment the family income (Jocson & Garcia, 2017), and in some families, mothers may even serve as the primary provider (De la Cruz, Protacio, Balanon, Yacat, & Francisco, 2001). Despite their engagement in multiple roles, working mothers are still primarily responsible for the caring of children and managing the household (Alampay, 2014). Even in cases where mothers are deployed abroad as overseas workers—a phenomenon that has become common as more women migrate to help improve their family's economic situation—mothers are still expected to sustain the caretaking of their children from afar (Parreñas, 2006). Although such traditional gender roles in Filipino families persist, some evidence indicates that fathers are becoming more present in their teenage children's daily lives compared to previous years (McCann-Erickson Philippines, 2006), and that certain paternal behaviors, such as psychological control and authoritative strategies, predict children's behaviors (Harper, 2010).

A set of studies from a Philippine data set of a nine-country, longitudinal study investigated differences between Filipino mothers and fathers in areas such as parenting cognitions, parental efficacy, and parenting behaviors. Alampay and Jocson (2011) found that mothers endorsed more progressive attitudes than fathers, but mothers and fathers espoused similar levels of authoritarian attitudes. Such parenting cognitions were found to be differentially related to parenting behaviors. In particular, authoritarian attitudes were related to maternal use of corporal punishment, whereas specific beliefs endorsing physical discipline were related to paternal use of corporal punishment (Jocson et al., 2012). Garcia and Alampay (2012) found that whereas children's externalizing behavior predicted subsequent parental hostility and aggression among both mothers and fathers, parents' experience of stressful life events predicted the same behaviors among fathers only. The same study found that parental efficacy is a significant moderator of the relation between stressful life events and parental hostility and aggression only among fathers (Garcia & Alampay, 2012), but another study found that parental efficacy predicted rejecting parenting behaviors among mothers (Daganzo, Alampay, & Lansford, 2014).

Given documented differences in relations between contextual predictors and parenting behaviors among mothers and fathers, it is reasonable to hypothesize variations in the patterns of relations linking poverty-related risks and Filipino mothers' and fathers' parenting behaviors in this study. With women in both developed and developing countries being about twice as likely as men to experience depression (Culbertson, 1997; Kessler, 2003; Salk, Hyde, & Abramson, 2017; World Health Organization, 2000), it would likewise be unsurprising to find differences in the ways mothers' and fathers' psychological well-being is related to risks and parenting

behaviors, as well as in the protective factors that might moderate the relations between risk, psychological well-being, and parenting.

### **The Current Study**

In summary, this dissertation addresses gaps in knowledge about the relations between contextual poverty-related risks, parents' psychological well-being, and parenting strategies in non-Western contexts, and adds to the even scarcer literature on protective factors that may buffer the negative impact of poverty-related stressors on mothers and fathers of adolescents living in poor urban areas in the Philippines.

### **Research Questions and Hypotheses**

The first goal of this dissertation is to examine the relations between contextual poverty-related risks, parents' psychological well-being, and parenting behaviors after accounting for family income (Figure 1). The following are the research questions and hypotheses pertaining to this first goal:

1. What are the relative associations between poverty-related risks (i.e., poor living conditions, neighborhood disorder, community violence exposure) and parents' psychological distress?

*Hypothesis 1a:* Poor living conditions, neighborhood disorder, and community violence exposure would be associated with higher levels of psychological distress.

*Hypothesis 1b:* Poor living conditions would be more strongly associated with psychological distress compared to other poverty-related risks.

2. What are the relative associations between poverty-related risks and parenting behaviors (i.e., warmth, rejection, communication, monitoring)?

*Hypothesis 2a:* Poor living conditions would be associated with higher levels of rejection and lower levels of warmth, communication, and monitoring.

*Hypothesis 2b:* Neighborhood disorder and community violence exposure would be associated with higher levels of rejection and monitoring, and lower levels of warmth and communication.

3. What are the relative associations of parents' psychological distress with parenting behaviors?

*Hypothesis 3a:* Psychological distress would be associated with higher levels of rejection and lower levels of warmth, communication, and monitoring.

4. Does parents' psychological distress mediate the relation between poverty-related risks and parenting behaviors?

*Hypothesis 4a:* Psychological distress would mediate the relation between poverty-related risks and parenting behaviors.

The second goal of this dissertation is to examine the individual, family, and community-level moderators of the relation between poverty-related risks and parents' psychological well-being, and the relation between poverty-related risks and parenting strategies. The following are the research questions and hypotheses pertaining to this second goal:

5. Does religiosity moderate the relations between poverty-related risks (i.e., poor living conditions, neighborhood disorder, community violence exposure) and parents' psychological distress, and between poverty-related risks and parenting behaviors (i.e., warmth, rejection, communication, monitoring)?

*Hypothesis 5a:* Religiosity would moderate the relations between poverty-related risks and parents' psychological distress, and between poverty-related risks and parenting behaviors.

*Hypothesis 5b:* The relation between poverty-related risks and psychological distress would be weaker at high levels of religiosity compared to low levels of religiosity.

6. Does familism moderate the relations between poverty-related risks and parents' psychological distress and between poverty-related risks and parenting behaviors?

*Hypothesis 6a:* Familism would moderate the relations between poverty-related risks and parents' psychological distress, and between poverty-related risks and parenting behaviors.

*Hypothesis 6b:* The relation between poverty-related risks and psychological distress would be weaker at high levels of familism compared to low levels of familism.

*Hypothesis 6c:* The relation between poverty-related risks and rejecting parenting would be weaker at high levels of familism compared to low levels of familism.

*Hypothesis 6d:* The relation between neighborhood disorder and monitoring would be stronger at high levels of familism compared to low levels of familism.

*Hypothesis 6e:* The relation between community violence exposure and monitoring would be stronger at high levels of familism compared to low levels of familism.

7. Does neighborhood cohesion moderate the relations between poverty-related risks and parents' psychological distress and between poverty-related risks and parenting behaviors?

*Hypothesis 7a:* Neighborhood cohesion would moderate the relations between poverty-related risks and parents' psychological distress, and between poverty-related

risks and parenting behaviors.

*Hypothesis 7b:* The relation between poverty-related risks and psychological distress would be weaker at high levels of neighborhood cohesion compared to low levels of neighborhood cohesion.

*Hypothesis 7c:* The relation between poverty-related risks and rejection will be weaker at high levels of neighborhood cohesion compared to low levels of neighborhood cohesion.

*Hypothesis 7d:* The relation between community violence exposure and monitoring would be weaker at high levels of neighborhood cohesion compared to low levels of neighborhood cohesion.

Finally, the third goal of this dissertation is to investigate differences between mothers and fathers in their reports of poverty-related risks, psychological distress, and parenting behaviors. The study also examines differences in the proposed mediated and moderated relations between these variables among Filipino mothers and fathers. The following are the research questions and hypotheses pertaining to this third goal:

8. Do mothers and fathers differ in their reports of poverty-related risks, psychological distress, parenting behaviors, and religiosity, familism, and neighborhood cohesion?

*Hypothesis 8a:* Mothers will report higher levels of psychological distress than fathers.

*Hypothesis 8b:* Mothers will report higher engagement in parenting behaviors (i.e., warmth, rejection, communication, monitoring) than fathers.

9. Are there differences in the relations between poverty-related risks, psychological distress, and parenting behaviors for mothers and fathers?

*Hypothesis 9a:* Poor living conditions, neighborhood disorder, and community violence exposure would be more strongly associated with psychological distress among mothers than fathers.

*Hypothesis 9b:* Poor living conditions, neighborhood disorder, and community violence exposure would be more strongly associated with rejection among mothers than fathers.

*Hypothesis 9c:* Poor living conditions, neighborhood disorder, and community violence exposure would be more strongly associated with lower warmth and communication among mothers than fathers.

*Hypothesis 9d:* Neighborhood disorder and community violence exposure would be more strongly associated with monitoring among mothers than fathers.

10. Do religiosity, familism, and neighborhood cohesion moderate the relations between poverty-related risks and psychological distress for both mothers and fathers?

*Hypothesis 10a:* Religiosity, familism, and neighborhood cohesion would moderate the relations between poverty-related risks and psychological distress for both mothers and fathers.

11. Do religiosity, familism and neighborhood cohesion moderate the relations between poverty-related risks and parenting behaviors both mothers and fathers?

*Hypothesis 11a:* Religiosity, familism, and neighborhood cohesion would moderate the relations between poverty-related risks and parenting behaviors for both mothers and fathers.

## **CHAPTER II**

### **Method**

#### **Sample**

The sample consisted of 116 mothers or mother figures and 84 fathers or father figures from 119 families residing in low-income communities within metropolitan (Metro) Manila, and who have at least one child between the ages of 12 and 18 in the household. Table 1 displays key demographic characteristics of the sample. Mothers and fathers were recruited from the same family, but parents without partners, or parents whose partners did not want to participate, were also eligible. Data were provided by both mothers and fathers in 81 families, by the mother only in 35 families, and by the father only in three families. On the whole, the participants represented a financially disadvantaged group, with families classified as poor (earning less than PhP 7890/USD 167 per month) to lower middle income (earning PhP 15780–31560/USD 335–671 per month), according to Filipino income class classification estimates derived from the 2012 national statistics (Albert & Raymundo, 2015). Ninety-three percent of the sample identified as Catholic.

The study was conducted in three low-income *barangays* (local villages) within Metro Manila in the summer of 2016. Having 12.88 million residents as of 2015 (Philippine Statistics Authority, 2016a), Metro Manila is one of the most densely populated metropolitan areas in the world. The participants were recruited from *barangays* in Marikina ( $n = 66$ ), Pasig ( $n = 74$ ), and Quezon City ( $n = 60$ ), three highly urbanized cities. These sites were chosen because they were among the four cities with highest poverty incidence in the second district of Metro Manila

(National Statistical Coordination Board, 2009). Of the three cities, Quezon City has the highest reported number of crimes, and tops the list of cities in the Philippines with the most number of crimes such as murder, homicide, physical injury and rape, robbery, and theft (Philippine National Police, 2015). Pasig and Marikina are highly populated cities known to be vulnerable to flooding during typhoons, particularly in residential and informal settlement areas along the river, where the *barangays* included in this study were located. Table 1 presents demographic characteristics of the participants broken down by site. Parents from the Pasig site reported significantly higher levels of education compared to parents from the Quezon City site, and parents from the Pasig site had younger children on average compared to parents from the Marikina site. There were no other significant differences between sites with respect to demographic characteristics.

## **Procedure**

**Research team training and pilot testing.** To conduct this study, I collaborated with the Ateneo de Manila University Psychology Department, which served as the host institution for data collection. Dr. Liane Peña Alampay, associate professor and research director of the Psychology Department at Ateneo de Manila University, served as faculty mentor and collaborator. I formed a research team composed of Master's-level Psychology students attending Ateneo de Manila University to recruit participants and collect data. A call for research assistants was announced through the graduate student listserv of the Psychology department. I then selected five research assistants (three female and two male), giving preference to interested applicants who had previous research experience with parents and families.

In sessions lasting approximately two hours, I trained the research team prior to data collection. The training session covered recruitment and survey administration procedures, research ethics, and culturally-relevant strategies, derived from my previous experience training research assistants as the project manager for the Philippine site of a large longitudinal and multi-country study on parenting and child development. The training also covered reflexivity, a process that incorporates self-reflection and objective dialogue in the research procedures to address potential biases (Finlay, 2002). As native Filipinos, all members of the research team are familiar with the cultural context and are fluent in the local language. However, they occupied a higher socioeconomic status compared to the participants and did not reside in the communities where the participants lived. In addition, all team members were younger than the participants and were not parents. Hence, the training incorporated discussions regarding potential biases that may stem from them having different personal experiences and social identities compared to the participants, and how to address these biases.

After training, each research assistant conducted at least one pilot testing of the survey questionnaire with a parent, and solicited feedback regarding clarity, contextual relevance, wording, and phrasing of survey items. Since several of the measures used for this study were previously piloted on 20 mothers (Jocson & Garcia, 2017), the pilot test conducted by the research team also included open-ended questions on the relevance and applicability of the questions for fathers. To account for site-specific differences, the pilot test also included open-ended questions on neighborhood dangers and resources. In total, five mothers and five fathers participated in the pilot testing. Feedback from the ten pilot participants was incorporated into the final revisions of the survey questionnaire.

**Sampling and recruitment.** Several steps were taken to ensure that the study procedures are consistent with principles of conducting culturally appropriate research in the Philippines (Pe-Pua, 2006; Pe-Pua & Protacio-Marcelino, 2000). In particular, the research team established rapport and trust by visiting the *barangays* prior to data collection. During my preliminary visits, I reached out to the target site's *barangay* captain, the highest elected official in the local community, and gained their support. Subsequently, I made several visits to the *barangays* over a period of three months to attend events, such as basketball games and *barangay* meetings to interact with local residents. Through *pagdalaw-dalaw* (informal visiting) and *pakikisama* (getting along) with residents in these events, I hoped to become a familiar face in the community, thus facilitating relationships in which I could be as close to *hindi ibang tao* (one of us) as possible (Pe-Pua, 2006).

After a period of rapport-building with the communities, recruitment letters were given to mothers and fathers via the *barangay* captain. A total of 215 letters were distributed to families residing in informal settlements, shantytowns, relocation sites, and other low-income areas within the *barangays*. One hundred fifty-five families who were interested sent back their contact information through the *barangay* captain. The research team contacted parents by phone to describe the study and determine eligibility by confirming their residence in the site and asking if they have a child aged 12 to 18 living with them at home. Among potential participants who did not have phones, eligibility was confirmed through *barangay* coordinators. Those who met the criteria were invited to participate. If they indicated that they had a partner, their partners were also invited, but not required, to participate. Parents were recruited until the quota of 200 participants was filled, with a target of having an approximately equal number of participants for each of the three sites.

The target sample of 200 participants was determined after accounting for the feasibility of collecting data given the project timeline and after conducting power analyses. Specifically, power analyses showed that the expected sample size of 200 will have power of .89 at alpha level of .05 to detect a small effect (i.e.,  $R^2 = .10$ ) within a model that has ten predictors (Jaccard & Wan, 1996). For power in mediation analysis, a sample of at least 148 was required to have power of .80 to detect path estimates with small magnitudes of  $\alpha = .26$  and  $\beta = .26$  using the bias-corrected bootstrap method (Fritz & MacKinnon, 2007). For analyses that compares the scores of mothers and fathers, the expected sample size of 100 mothers and 100 fathers was estimated to have power of .80 at alpha level of .05 to detect a small effect of  $d = .40$  (Cohen, 1988). In sum, the expected sample size of 200 was expected to have adequate power to detect significant associations between the focal independent and dependent variables.

The research assistants and I traveled to a community center close to the participants' homes and administered structured, one-on-one surveys to mothers and fathers. The interviewer and participant were matched by gender, such that female research assistants interviewed mothers and male research assistants interviewed fathers. After providing written informed consent, parents responded to survey questionnaires assessing demographic information, poverty-related risks, psychological well-being, parenting behaviors, and protective factors. For questionnaires that asked about parenting behaviors, participants were asked to respond regarding the target adolescent child. Among parents with more than one adolescent child, the interviewer randomly chose a target child. The entire survey was orally administered by interviewers in Filipino. The survey administration lasted approximately one and a half hours, and each parent received a PhP 500 (USD 10) cash incentive or grocery bag as compensation.

## Measures

This study utilized measures that have been adapted for and used previously with Filipino samples. For standard measures that were used for the first time in this study, four bilingual graduate student research assistants at Ateneo de Manila University translated and back-translated surveys to ensure linguistic and conceptual equivalence across the English and Filipino versions of the instruments.

**Demographic information.** Parents responded to a questionnaire on demographic information including age, educational attainment, employment status, marital status, number of children, household size, religion, and family income. If applicable, they were asked to provide similar demographic information about their spouse or partner. The family income measure included 16 response categories that indicated ranges of gross annual family income (e.g., 0 = *no income*, 1 = *up to PhP 24,000 or USD 480*, 2 = *PhP 24,000–48,000 or USD 480–960*, 3 = *PhP 48,000–72,000 or USD 960–1,440*, 4 = *72,000–96,000 or USD 1,440–1,920*; see note in Table 4 for the complete set of response options).

**Risk factors.** Individuals living in poverty in developing countries are subject to a wide range of physical and psychosocial risks beyond income deprivation (Alkire & Santos, 2014; Britto et al., 2017; Gordon et al., 2003; Minujin et al., 2006). Given the breadth of stressors that characterize the experience of poverty in developing countries, researchers advocate the use of multidimensional measures when assessing poverty within this population (Alkire & Santos, 2014). Thus, this study adopts a multidimensional perspective in assessing poverty-related risks.

*Living conditions risk index.* Measures for living conditions were adapted from items from two nationally representative household surveys conducted in the Philippines: The Family Income and Expenditure Survey (FIES), conducted once every three years, and the Annual

Poverty Indicators Survey (APIS), conducted during the intervening years without FIES (Balisacan, 2011; National Statistics Office, 2010). Parents reported on four risk factors: (a) *tenure status of dwelling unit* indicated by three categorical items (i.e., with consent of owner, without consent of owner, other); (b) *electricity* indicated by three categorical items (i.e., own meter, tapped/shared electricity, no electricity); (c) *water supply* measured using eight categorical items (i.e., own use faucet community water system, shared faucet water community system, own use deep well, shared deep well, dug well/stream/rain, peddler, bottled water, other). Using an item from the New Hope project (Huston et al., 2001), (d) *food insecurity* was indicated by parents' description of the food eaten in the past month using a 4-point scale ranging from (1) *often not enough to eat* to (4) *enough of the kinds of food you want*.

A composite risk index for living conditions was calculated by summing dichotomously recoded scores of the four factors: (a) *tenure status of dwelling unit* (0 = with consent of owner, 1 = without consent of owner), (b) *electricity* (0 = own meter, 1 = tapped/shared or no electricity), (c) *water supply* (0 = own use faucet community water system, 1 = shared faucet community water system), and (d) *food insecurity*, with a score of 1 given if the parent's score was less than 1 standard deviation below the mean and 0 in all other cases (Evans & Kim, 2007). The four recoded items were mostly significantly correlated at  $p < .001$  ( $r_s$  ranging from .18 to .69;  $\alpha = .76$  for mothers;  $\alpha = .68$  for fathers). Higher risk index scores indicate poorer living conditions.

*Neighborhood disorder* was measured using a scale developed for this study, which was adapted from the Perceived Neighborhood Disorder Scale, which has demonstrated high reliability and external validity (Ross & Mirowsky, 1999). The measure was adapted to the local context by creating items derived from low-income mothers' responses regarding the things that they dislike about their neighborhood, obtained in a pilot qualitative study (Jocson & Garcia,

2017). Items were also added in consultation with community leaders of the target sites and research assistants who had prior experience collecting data in low-income communities. Parents responded to 9 items indicating physical disorder (e.g., garbage, stray animals, bad smell) and 13 items indicating social disorder (e.g., unsupervised youth, gambling, gossip) using a 4-point scale ranging from (1) *strongly disagree* to (4) *strongly agree*. Scores on the 22 items were averaged, with higher scores indicating higher neighborhood disorder ( $\alpha = .89$  for mothers;  $\alpha = .90$  for fathers).

*Community violence exposure* was measured using an adapted version of the My Exposure to Violence (My ETV) Scale parent-report (Selner-O'Hagan, Kindlon, Buka, Raudenbush, & Earls, 1998). Parents reported on 21 items asking how often they have witnessed violence (11 items, e.g., seen someone else getting beaten up or mugged), or have been personally victimized (10 items, e.g., have you yourself been beaten up or mugged) in their neighborhood in the past year using a 9-point scale ranging from (1) *never* to (9) *almost every day*. This scale has demonstrated high levels of reliability, determined using test-retest and internal consistency analyses; and has shown evidence of construct validity, provided by item analysis (Selner-O'Hagan et al., 1998). Scores on the 21 items were summed, with higher scores indicating more frequent past-year exposure to community violence ( $\alpha = .85$  for mothers;  $\alpha = .85$  for fathers).

**Psychological well-being.** An adapted version of the Depression Anxiety and Stress Scale (DASS-21) short form (Lovibond & Lovibond, 1995) was used to measure parents' psychological well-being. This 21-item scale was designed to measure emotional distress using three subscales. *Depression* refers to low levels of positive affect (7 items, e.g., I felt life was meaningless); *anxiety* includes symptoms indicating fear and anticipation of negative events (8

items, e.g., I felt scared without any good reason); and *stress* refers to feelings of overarousal, tension, and agitation (6 items, e.g., I found it difficult to relax). Parents indicated how much the statements apply to them using a 4-point scale ranging from (1) *never* to (4) *almost always*. The DASS-21 has demonstrated good reliability and validity in American and British samples (Henry & Crawford, 2005; Norton, 2007). Factor analyses and multigroup analysis conducted with samples from six Asian populations (i.e., Malaysian, Indonesian, Singaporean, Sri Lankan, Taiwanese, Thai) found that using a reduced 18-item scale yielded better factorial structure and psychometric properties than the 21-item scale (Oei, Sawang, Goh, & Mukhtar, 2013). In the current study, using the 21-item scale yielded better psychometric properties than the 18-item scale. Scores on the 21 items were averaged, with higher scores indicating higher levels of psychological distress ( $\alpha = .92$  for mothers;  $\alpha = .92$  for fathers). A previous study that used this scale with a Filipino sample obtained similarly high reliability scores (Bello, Robles, Sarmiento, Tuliao, & Reyes, 2011).

**Parenting behaviors.** *Warmth* and *rejection* were measured using the acceptance and rejection subscales, respectively, of an adapted parent report version of the Child's Report of Parental Behavior Inventory (CRPBI), which has yielded adequate internal consistency and inter-rater reliability (Schwarz, Barton-Henry, & Pruzinsky, 1985). Parents reported on 13 items indicating warmth/acceptance (e.g., I find ways to show my child that I love him or her, I like my child as s/he is), and 7 items indicating rejection (e.g., I am not very patient with my child, I always complain about what my child does) on a 5-point scale ranging from (1) *not true at all* to (5) *very true*. Based on the results of principal component analysis conducted with this sample, along with results of a qualitative study (Jocson & Garcia, 2017), one item was dropped from the original warmth/acceptance subscale (i.e., I make my child feel like s/he is the most important

person in my life) and one item was dropped from the original rejection subscale (i.e., I act as though my child is in the way). Items on each of the subscales were averaged, with higher scores indicating higher levels of warmth/acceptance ( $\alpha = .79$  for mothers;  $\alpha = .80$  for fathers), and higher levels of rejection ( $\alpha = .78$  for mothers;  $\alpha = .72$  for fathers).

*Parent-adolescent communication* was assessed using an adapted version of the parent-child communication scale (parent report) used in the Fast Track project (Conduct Problems Prevention Research Group, 1999), which was derived from the revised parent-adolescent communication form of the Pittsburgh Youth Study (Rains, 2004). Parents responded to 20 items (e.g., Are you satisfied with how you and your child talk together? Does your child tell you about his/her personal problems?) using a 5-point scale ranging from (1) *almost never* to (5) *almost always*. Previous psychometric analyses showed that the subscales of parent communication, child empathy/listening, and child emotional expression showed adequate reliability (Rains, 2004). Principal components analysis conducted on this study's sample revealed two factors indicating open communication (13 items) and restricted communication (7 items). Scores for the 13 items indicating open communication were averaged, with  $\alpha = .88$  for mothers;  $\alpha = .80$  for fathers. Higher scores indicate higher levels of open parent-adolescent communication.

*Parental monitoring* was measured using a 16-item scale derived from Conger et al. (1994) and Steinberg, Fletcher, and Darling (1994). The first eight items indicate *solicitation of information*, or the extent to which parents try to obtain information (i.e., "How much do you try to know...") concerning their child's activities and friendships (e.g., who your child's friends are, where your child goes at night). Items concerning parents' solicitation of information regarding children's romantic interests and internet use were added based on results of a

qualitative study (Jocson & Garcia, 2017). Parents reported on these items using a 3-point scale ranging from (0) *I don't try* to (2) *I try a lot*. The last eight items indicate *rule-setting*, or how often parents set rules or limits about the same items using a 4-point scale ranging from (0) *never* to (3) *always*. Mean scores on the two subscales were standardized and summed to create a total parental monitoring scale, with higher scores indicating higher levels of monitoring ( $\alpha = .87$  for mothers;  $\alpha = .87$  for fathers). The reliability for this study's sample is similar to that reported by previous researchers (e.g., Ceballo et al., 2003), including those who used the same scale with a multi-country sample including the Philippines (Skinner et al., 2014).

**Protective factors.** *Religiosity* was measured using an adapted 10-item survey on religious involvement (Levin, Taylor, & Chatters, 1995) with subscales of religious activities (7 items, e.g., attending religious services, praying; 1 = *never* to 5 = *almost every day*) and subjective religiosity (3 items, e.g., How religious would you say you are?, 1 = *not religious at all* to 4 = *very religious*; How important is religion in your home?, 1 = *not important at all* to 4 = *very important*). This scale has demonstrated sound psychometric properties and construct validity (Ceballo & Hurd, 2008; Levin et al., 1995; Mattis et al., 2003). Based on pilot test feedback from low-income Filipino mothers, one item was changed from "How often do you ask someone to pray for you?" to "How often do you pray for someone else?" to better fit the local context (Jocson & Garcia, 2017). Mean scores on the subscales were standardized and summed to create a total religiosity scale, with  $\alpha = .80$  for mothers;  $\alpha = .75$  for fathers.

*Familism values* were assessed using the mean of 11 items from the Multiphasic Assessment of Cultural Constructs (Gaines et al., 1997). Items include "In my opinion, the family is the most important social institution of all", and "I cherish the time that I spend with my relatives" with response scales ranging from (1) *strongly disagree* to (5) *strongly agree*. The

scale yielded an  $\alpha = .83$  for mothers and  $\alpha = .85$  for fathers. These reliability estimates are similar to that reported by previous researchers (Kennedy & Ceballo, 2014; Villarreal, Blozis, & Widaman, 2005). *Familism behaviors* were measured using the mean of 12 items that were adapted from Fuligni, Tseng, and Lam's (1999) family obligations scale, which has shown adequate reliability with a sample of Filipino college students (King & Ganotice, 2015). Parents indicated how often they engage in family-oriented behaviors (e.g., spend time at home with family, make sacrifices for family) with responses ranging from (1) *almost never* to (5) *almost always*. Cronbach's  $\alpha$  was .85 for mothers and .86 for fathers.

*Neighborhood cohesion* was measured using the informal social control subscale of the collective efficacy scale (Sampson et al., 1997), that was adapted to fit the local context. The collective efficacy scale is a well-established instrument for measuring neighborhood-level social processes (Odgers et al., 2009), and has demonstrated high internal reliability in previous studies (Ahern & Galea, 2011; Jaffee, Caspi, Moffitt, Polo-Tomás, & Taylor, 2007). Parents responded to five items indicating how likely neighbors will intervene if there is a problem in the neighborhood (e.g., if the police station closest to home was going to be closed, if a fight broke out) using a 5-point scale ranging from (1) *very unlikely* to (5) *very likely*. This scale yielded an  $\alpha = .79$  for mothers and .66 for fathers.

## **CHAPTER III**

### **Results**

#### **Analytic Strategy**

After data collection, research assistants entered data in Qualtrics and SPSS using computers in Ateneo de Manila University. Data were entered twice and checked for discrepancies. Initial analyses were conducted to ensure sound psychometric properties of the measures that were adapted and developed for this study. In particular, inter-item correlations and principal component analyses were conducted on the scales for neighborhood disorder, community violence exposure, psychological distress, parent-adolescent communication, parental monitoring, parental warmth and rejection, religiosity, familism values and behaviors, and neighborhood cohesion.

After conducting preliminary descriptive and bivariate analyses, the main analyses were conducted in a series of steps. To address the first set of research questions regarding the relative associations of risk factors with parents' psychological well-being and parenting behaviors, multiple regression analyses in MPlus (Muthén & Muthén, 2015) were conducted. Standardized and unstandardized path estimates were obtained to assess the magnitude of relations between variables. Next, the variables that had significant relations in the multiple regression analyses were tested for mediation and moderation effects, in line with the hypothesized models. Mediation analyses were conducted using bootstrapping (Hayes, 2009; Preacher & Hayes, 2004, 2008). Moderation analyses were conducted in SPSS using methods recommended by Aiken and West (1991), with simple slopes probed using a simple moderation model (model 1) of the

PROCESS macro package(Hayes, 2013). Both sets of analyses were conducted separately for mothers and fathers to compare the patterns of mediated and moderated relations across parent gender. Finally, Pearson's chi-square and paired samples *t*-tests were conducted to test differences in mothers' and fathers' reports on key demographic variables, poverty-related risks, psychological well-being, parenting behaviors, and protective factors.

### Preliminary Analyses

**Descriptive and bivariate analyses.** Tables 2 and 3 present descriptive statistics and bivariate correlations of the focal variables for mothers and fathers, respectively. Some of the variables displayed violations of normality. Community violence exposure scores were positively skewed, with several parents reporting low levels of exposure (*z*-values for skew ranged from 6.1 to 9.7; *z*-values for kurtosis ranged from 5.1 to 12.3. Scores on the living conditions risk index were also positively skewed (*z*-values for skew ranged from 2.3 to 2.4). Familism values scores were high on average, and displayed negative skewness for mothers (*z*-value for skew = -8.0; *z*-value for kurtosis = 11.5) and fathers (*z*-value for skew = -4.2; *z*-value for kurtosis = 2.8). Warmth and neighborhood cohesion scores were negatively skewed for both mothers and fathers (*z*-values for skew ranged from -5.0 to -2.1), whereas communication, monitoring, and familism behaviors were negatively skewed only for mothers (*z*-values for skew ranged from -5.7 to -2.7).

The bivariate correlations (Tables 2 and 3) provide preliminary support for the hypothesized relations between risk factors, parents' psychological well-being, and parenting behaviors. The living conditions risk index and neighborhood disorder had significant moderate positive correlations with psychological distress for both mothers and fathers, whereas community violence exposure had a significant moderate positive correlation with psychological

distress for mothers only. The risk factors also had statistically significant moderate correlations with parenting behaviors. Poorer living conditions were significantly and moderately associated with lower warmth and higher rejection for fathers only, whereas neighborhood disorder was significantly and moderately associated with higher rejection for both mothers and fathers.

Psychological distress, in turn, was significantly and moderately associated with lower warmth and higher rejection for fathers, and had a significant small positive correlation with rejection for mothers. For protective factors, mothers' religiosity had a significant small negative association with rejection, a significant moderate positive association with warmth and monitoring, and a significant large positive association with communication. Among fathers, religiosity had a significant moderate positive association with warmth and monitoring. Familism values and behaviors had significant and small-to-moderate associations with higher communication and monitoring for both mothers and fathers. Lastly, neighborhood cohesion had a significant small positive correlation with monitoring for mothers only.

Several demographic variables had significant small-to-moderate correlations with the focal variables. In particular, parents in the Quezon City site reported significantly higher scores on the living conditions risk index ( $r = .21, p = .003$ ), neighborhood disorder ( $r = .45, p < .001$ ), community violence exposure ( $r = .23, p = .001$ ), and significantly lower scores on communication ( $r = -.14, p = .041$ ) and neighborhood cohesion ( $r = -.15, p = .032$ ), compared to parents in the Marikina site. Parents in the Pasig site reported significantly lower scores on the living conditions risk index ( $r = -.34, p < .001$ ) neighborhood disorder ( $r = -.32, p < .001$ ), and psychological distress ( $r = -.15, p = .039$ ), compared to parents in the Marikina site. Parents with higher education scored significantly lower on the living conditions risk index ( $r = -.24, p = .001$ ) and scored significantly higher on warmth ( $r = .15, p = .034$ ), communication ( $r = .17, p = .021$ ), and neighborhood cohesion ( $r = .18, p = .017$ ).

.013), monitoring ( $r = .18, p = .010$ ). In addition, parents with higher family income reported significantly lower scores on the living conditions risk index ( $r = -.23, p = .001$ ) and psychological distress ( $r = -.16, p = .020$ ). Lastly, older parents reported significantly lower scores on community violence exposure ( $r = -.17, p = .016$ ) and significantly higher scores on religiosity ( $r = .16, p = .023$ ). Child age and sex were not significantly correlated to any of the focal variables.

## **Primary Analyses**

**Relations between risk factors, psychological well-being, and parenting.** To address the first set of research questions regarding the relative associations of risk factors with parents' psychological well-being and parenting behaviors, multiple regression analyses were conducted in MPlus 7.4 (Muthén & Muthén, 2015) using maximum likelihood estimation with standard errors robust to non-normality (see Table 4). The analyses tested one fully saturated model with paths from the risk factors (i.e., living conditions risk index, neighborhood disorder, community violence exposure) to psychological distress, as well as paths from the risk factors and psychological distress to parenting behaviors (i.e., warmth, rejection, monitoring, communication). Five demographic variables were included as covariates in the model: two dummy-coded research site variables, parent age, parent education, and family income. Child sex and age were not included as covariates because they had no significant correlations to any of the focal variables. There were no missing data on any of the demographic and focal variables.

Significant associations were found between risk factors, psychological distress, and parenting behaviors, after accounting for demographic covariates (Table 4). For mothers, community violence exposure was associated with higher levels of psychological distress and

monitoring (model  $R^2 = .21, p = .017$ ); and neighborhood disorder and psychological distress were associated with higher rejection (model  $R^2 = .19, p = .002$ ). For fathers, poorer living conditions were associated with higher levels of psychological distress (model  $R^2 = .27, p = .003$ ). Poorer living conditions and psychological distress among fathers were also associated with lower levels of warmth (model  $R^2 = .30, p < .001$ ). Lastly, neighborhood disorder and psychological distress were associated with higher rejection for fathers ( $R^2 = .30, p < .001$ ). Values of the squared multiple correlation for all dependent variables were small-to-moderate in magnitude (Cohen, 1992).

Indirect effect analyses were conducted using a simple mediation model (model 4) of the PROCESS macro package for SPSS (Hayes, 2013). This macro uses a bootstrap resampling process where the original data are resampled 5,000 times to generate a 95% bias-corrected bootstrap confidence interval (CI) where the indirect effect lies. If zero is not within the 95% CI, the indirect effect is significant at  $p < .05$ . Bootstrapping was used to test for indirect effects because it can be applied to small samples with higher confidence and makes no assumptions about normality of the distribution of variables (Hayes & Scharkow, 2013; Preacher & Hayes, 2004). Based on the results of the multiple regression analyses, four indirect effect tests were conducted: (a) the indirect relation of community violence exposure to monitoring through psychological distress for mothers, (b) the indirect relation of neighborhood disorder to rejection through psychological distress for mothers, (c) the indirect relation of neighborhood disorder to rejection through psychological distress for fathers, and (d) the indirect relation of the living condition risk index to warmth through psychological distress for fathers.

Initial tests revealed no significant indirect effects for any of the models. However, when psychological distress was broken down into its three subscales (i.e., depression, anxiety, and

stress), three significant indirect effects were found. First, neighborhood disorder had a significant positive indirect link with rejection through depression for mothers ( $B = .07$ ,  $SE = .05$ , 95% CI: [.005, .222]). This means that a unit increase in neighborhood disorder is expected to result in a .07 unit increase in depression because of increased levels of psychological distress. Second, neighborhood disorder had a significant positive indirect link with rejection through stress for fathers ( $B = .15$ ,  $SE = .09$ , 95% CI: [.017, .380]). This means that a unit increase in neighborhood disorder is expected to result in a .15 unit increase in rejection because of increased levels of stress. Third, the living conditions risk index had a significant negative indirect link with warmth through stress for fathers ( $B = -.03$ ,  $SE = .02$ , 95% CI: [-.076, -.006]). This means that a unit increase in the living conditions risk index is expected to result in a .03 decrease in warmth because of increased levels of stress.

**Moderation analyses.** To address the second set of research questions regarding moderation, hierarchical multiple regression analyses were conducted in SPSS. Based on the results of the multiple regression analyses, the hypothesized protective factors (i.e., religiosity, familism values, familism behaviors, neighborhood cohesion) were investigated as moderators of six relations: (a) community violence exposure and psychological distress for mothers, (b) community violence exposure and monitoring for mothers, (c) neighborhood disorder and rejection for mothers, (d) living conditions risk index and psychological distress for fathers, (e) living conditions risk index and warmth for fathers, and (f) neighborhood disorder and rejection for fathers. Following guidelines outlined by Aiken and West (1991), demographic control variables were entered in the first step; mean-centered predictor and moderator variables were entered in the second step to investigate main effects; and an interaction term (i.e., the product of the centered predictor and moderator variable) was entered in the third step to investigate

moderation effects. For significant interactions, conditional effects were probed at high ( $1\text{ SD}$  above the mean), average, and low ( $1\text{ SD}$  below the mean) levels of the moderator using a simple moderation model of the PROCESS macro package for SPSS (Hayes, 2013).

Three significant moderation effects were found. First, religiosity significantly moderated the relation of community violence exposure and psychological distress for mothers (Table 5). The regression coefficient for the product of community violence exposure and religiosity is  $B = -.08$  ( $SE = 0.03, p = .014$ ). This means that as religiosity increases by one unit, the slope of community violence exposure and psychological distress decreases by .08 unit. Simple slopes analyses show that community violence exposure was significantly associated with higher psychological distress at low ( $B = .40, SE = 0.09, p < .001$ ) and average levels of religiosity ( $B = .26, SE = 0.07, p < .001$ ), but this relation was non-significant at high levels of religiosity ( $B = .13, SE = 0.09, p = .152$ , Figure 3).

Second, neighborhood cohesion significantly moderated the relation of living conditions and psychological distress for fathers (Table 6). The regression coefficient for the product of the living conditions risk index and neighborhood cohesion is  $B = -.40$  ( $SE = 0.19, p = .043$ ). This means that as neighborhood cohesion increases by one unit, the slope of the living conditions risk index and psychological distress decreases by .40 unit. Simple slopes analyses revealed that higher scores on the living conditions risk index were significantly associated with higher psychological distress at low ( $B = 3.73, SE = 1.02, p < .001$ ) and average levels of neighborhood cohesion ( $B = 2.35, SE = 0.84, p = .006$ ), but this relation was non-significant at high levels of neighborhood cohesion ( $B = 0.97, SE = 1.13, p = .395$ , Figure 4).

Third, familism values significantly moderated the relation of neighborhood disorder and rejection for fathers (Table 7). This moderation effect was in the opposite direction; the

regression coefficient for the product of the living conditions risk index and neighborhood cohesion is  $B = .83$  ( $SE = 0.39, p = .038$ ). This means that as familism values increase by one unit, the slope of neighborhood disorder and rejecting parenting increases by .83 unit. Simple slopes analyses indicate that at low levels of familism values, neighborhood disorder did not have a significant relation with rejection ( $B = 0.18, SE = 0.27, p = .668$ ), whereas this relation was significant at average ( $B = 0.52, SE = 0.18, p = .006$ ) and high levels of familism values ( $B = 0.86, SE = 0.21, p < .001$ , Figure 5).

**Differences between mothers and fathers.** To address the third set of research questions regarding differences between mothers and fathers, chi-squared and paired samples  $t$ -tests and were conducted to compare scores of mother-father pairs within the same families (Table 8). Results showed that mothers were, on average, younger than fathers, and were less likely to be employed than fathers. Mothers had significantly higher scores than fathers in all parenting variables (i.e., warmth, rejection, communication, monitoring). Although total community violence exposure scores did not significantly differ between mothers and fathers, fathers scored significantly higher than mothers in the personal victimization subscale (see Table 9 for percentage of mothers and fathers reporting specific types of violence). Lastly, mothers reported higher neighborhood disorder and familism behaviors than fathers.

For differences in direct and mediated relations, multiple regression and indirect effect analyses that were described previously showed that the risk factor most significantly associated with psychological distress was community violence exposure for mothers, and living conditions for fathers. In addition, the relation between neighborhood disorder and rejection was mediated by depression for mothers and stress for fathers. The living conditions risk index had a direct

negative relation with warmth for fathers only, and this relation was mediated by stress.

Community violence exposure had a direct relation with monitoring for mothers only.

For differences in moderation, religiosity significantly moderated the relation between community violence exposure and psychological distress for mothers. For fathers, neighborhood cohesion was the significant moderator of the relation between living conditions and psychological distress. In addition, fathers' familism values moderated the relation between neighborhood disorder and rejection.

## **CHAPTER IV**

### **Discussion**

This dissertation used data from 200 low-income urban Filipino parents (a) to examine relations between contextual poverty-related risk factors, psychological well-being, and parenting behaviors; (b) to investigate religiosity, familism, and neighborhood cohesion as moderators of these relations; and (c) to examine similarities and differences between mothers and fathers. Results showed that among mothers, community violence exposure was associated with higher levels of psychological distress, which was, in turn, associated with higher reports of rejecting parenting behaviors. Among fathers, poor living conditions were associated with higher levels of psychological distress, which, in turn, was associated with lower reports of warmth and greater rejecting behavior. There was a positive relation between neighborhood disorder and rejecting parenting for mothers and fathers, and this relation was mediated by depressive symptoms for mothers and stress for fathers. With respect to protective factors, results revealed that religiosity significantly moderated the relation between community violence exposure and distress for mothers, and that neighborhood cohesion significantly moderated the relation between living conditions and psychological distress for fathers. Familism did not display a protective effect, and instead amplified the association between neighborhood disorder and rejecting parenting for fathers.

The following sections discuss the obtained results in further detail, using indigenous, family stress, and risk-protective models as guiding frameworks. First, the roles of contextual risks in predicting parents' psychological well-being and parenting behaviors are discussed.

Second, the moderating effects of religiosity, familism, and neighborhood cohesion are interpreted in relation to their cultural relevance in the local Philippine setting. Third, similarities and differences between mothers and fathers are addressed and placed in context. These findings are then integrated to suggest implications for theory, further research, interventions, and policy. Limitations of the study and future directions are discussed at the end of this chapter.

### **Relations Between Risk Factors, Psychological Well-Being, and Parenting**

**Contextual risks are associated with parents' psychological distress.** As hypothesized, contextual risks were significantly associated with parents' psychological distress, after controlling for demographic and socioeconomic variables. Of the three contextual risk factors of interest, community violence exposure emerged as the significant predictor of mothers' distress. This finding is consistent with previous studies documenting the negative effects of community violence exposure on women's mental health (Aisenberg, 2001; Mitchell et al., 2010). Whereas mothers in this sample reported low rates of personal victimization, a significant proportion reported witnessing violent events in their community. In particular, about half of the mothers reported seeing someone get hit, slapped or punched; using or selling drugs; and carrying or holding a gun or knife at least once in the past year. Being exposed to these events in their neighborhood could bring about a sense of stress and anxiety over their own and their family's safety and well-being. Feelings of frustration and powerlessness may also arise if mothers feel unable to protect their children from neighborhood danger, and could contribute to depression and low self-esteem (Aisenberg, 2001). That community violence exposure had the strongest relation to maternal psychological distress relative to living conditions and neighborhood disorder suggests that threats that are interpersonal in nature (e.g., witnessing a

person being physically assaulted by another) may be particularly detrimental for mothers' mental health. In addition, previous studies have shown that women report greater fear of crime and victimization than men (May, Rader, & Goodrum, 2010; Schafer, Huebner, & Bynum, 2006) even though they are less likely than men to experience victimization (Ferraro, 1996). This might be because women must be vigilant about additional threats such as rape and sexual assault apart from dangers that are also typically encountered by men (Ferraro, 1996). In general, these findings suggest that mothers are particularly vulnerable to the negative effects of exposure to violence in the community.

For fathers, the living conditions risk index contributed the most in predicting psychological distress. This is consistent with previous studies showing a link between housing quality and mental health (Evans et al., 2003; Jocson & McLoyd, 2015). Whereas these studies found this link among samples of mostly adult women, this is one of the first studies that examined the relation of several aspects of living conditions to low-income fathers' psychological well-being. The link between poor living conditions and paternal distress is unsurprising, given the traditional Filipino notion that fathers should provide for their family (Alampay, 2014; Liwag et al., 1998; Tan, 1994). In this study, most of the fathers were indeed viewed as providers, with 76% of the mothers and 86% of the fathers identifying the father as the primary earner or breadwinner of the family. Inability to secure basic needs such as food, housing, and access to water and electricity may be seen by fathers as a failure to fulfill this primary responsibility, and may contribute to feelings of depression, anxiety, and stress. As supported by parents' responses to open-ended questions in a pilot test for this study, one way in which a person can tell that a Filipino man is not doing well psychologically is if he is not working actively to fulfill his responsibilities at home. In addition, a previous study found that

stressful life events (e.g., money problems, medical problems for close family members) predicted fathers' hostility and aggression toward their 9-year-old children (Garcia & Alampay, 2012). These results are aligned with some of the assertions of the indigenous *pagdadala* (burden-bearing) model in the way Filipinos deal with difficulties. As Decenteceo (1999) noted, Filipinos are strongly committed to fulfilling their accountabilities, even "crawling on hands and knees if needed" (p. 89). Filipino fathers who reported higher deficiencies in basic needs such food, housing, electricity, and water, may feel overwhelmed by the burden of not being able to provide better living conditions for their family. Collectively, these findings indicate that in the local context, fathers' psychological well-being is tied closely to traditional notions and expectations regarding their family responsibilities, and their own perceived ability to meet those expectations.

**Parents' psychological distress is associated with parenting behaviors.** Psychological distress was significantly associated with lower warmth for fathers and higher rejection for both mothers and fathers, after controlling for demographic covariates and contextual risk factors. This finding is consistent with numerous studies showing that poor psychological well-being is linked with harsher and less nurturing parenting behaviors, as posited in the family stress model (Barajas-Gonzalez & Brooks-Gunn, 2014; Emmen et al., 2013; Jocson & McLoyd, 2015; Parke et al., 2004). Notable in this study is that psychological distress predicted lower warmth and more rejecting parenting for fathers, as most previous research has documented these links among samples of mostly mothers. In contrast, distress was associated with only rejection for mothers. It is possible that Filipino mothers express or manifest their distress through rejecting behaviors (e.g., complaining about the child, forgetting to help the child when needed, scolding the child), while still maintaining high levels of warmth. Filipino fathers' distress seems to be

manifested through lower warmth and more rejecting parenting behaviors, suggesting the important role of psychological well-being in multiple aspects of fathers' parenting.

Results showed that demographic and socioeconomic variables were better predictors of communication than contextual risk factors. For example, mothers with higher levels of education reported higher parent-adolescent communication quality, and fathers with younger children reported lower parent-adolescent communication quality. The link between maternal education and communication aligns with previous findings (Bornstein, Hahn, Suwalsky, & Haynes, 2003; Hoff, Laursen, & Tardif, 2002), and its replication in this study's sample of low-income mothers suggests that the benefits of education in fostering open communication extends to low-income contexts. Indeed, the cognitive and verbal competencies that individuals develop through formal schooling may help mothers in using a more verbal approach when interacting with their children (Duncan & Magnuson, 2003). This approach might be especially useful for mothers, who spend more time at home.

The significant association between mothers' community violence exposure and monitoring aligns with previous studies suggesting a link between neighborhood danger and strict control (Fauth et al., 2007; Hill & Herman-Stahl, 2002). This finding is also consistent with a study showing that low-income Filipino mothers exposed to community violence engage in strict monitoring as a precautionary measure to ensure the safety of their children (Jocson & Garcia, 2017). It appears that the distress associated with community violence exposure does not prevent mothers from engaging in frequent monitoring of their children's activities. High levels of parental monitoring may be adaptive in the local context, given that Filipino adolescents continue to value and endorse parental authority in setting rules and making decisions about their lives despite increasing needs for autonomy (Alampay, 2014).

**Contextual risks are associated with parenting behaviors via parents' psychological distress.** Neighborhood disorder was significantly associated with rejecting parenting for both mothers and fathers, after controlling for demographic covariates and other contextual risk factors. Poorer living conditions were also significantly associated with lower warmth among fathers. These direct relations were mediated by depression for mothers and stress for fathers. As one of the first studies that found these distinctive patterns, findings highlight the importance of considering different aspects of parents' psychological well-being when studying its relations with poverty-related risks and parenting. In particular, results indicated that neighborhood disorder contributes to fathers' rejecting parenting via feelings of tension, agitation, and frustration, and contributes to mothers' rejecting parenting via feelings of depressed mood and low positive affect. Although it can be argued that these distress symptoms are gendered responses to stressors, results from this study show that mothers and fathers did not significantly differ in their reports of depression, anxiety, and stress. The indirect relation found between neighborhood disorder and rejection through depression for mothers is consistent with prior literature on the family stress model. The majority of these studies focus on maternal depression as an indicator of parents' psychological well-being (Newland, Crnic, Cox, & Mills-Koonce, 2013), including studies that examine the effect of neighborhood risk factors on parenting and child outcomes (Caughy, Nettles, & O'Campo, 2007; Jocson & McLoyd, 2015; Kohen, Dahinten, & McIntosh, 2008).

With respect to the Philippine context, markers of physical and social neighborhood disorder include dirty and narrow streets, stray animals, garbage, drug use, gambling, gossip, and lack of adequate police protection. Indeed, these neighborhood conditions may induce feelings of powerlessness, mistrust, and social isolation (Ross & Mirowsky, 2009), which may lead to

depressed mood among mothers. Daily exposure to disordered physical and social environments may also increase stress and agitation among fathers. In turn, psychological distress may increase difficulties in parenting, especially during adolescence, when children experience several developmental transitions. Rejecting parenting behaviors have been shown to have negative implications for adolescents. For example, rejecting parenting (hostility, punitiveness, low warmth) predicted young adolescents' antisocial behavior in a sample of low-income mother-son dyads (Trentacosta & Shaw, 2008). In the Philippine context, maintaining a harmonious parent-child relationship is important during the adolescence stage as children negotiate autonomy needs in a context that values family interdependence (Alampay, 2014).

### **The Moderating Roles of Religiosity, Neighborhood Cohesion, and Familism**

**Religiosity served as a protective factor for mothers.** Religiosity moderated the relation between mothers' community violence exposure and psychological distress, such that at low and average levels of religiosity, community violence exposure was significantly associated with higher psychological distress, but this relation was non-significant at high levels of religiosity. Numerous studies have shown the protective or promotive role of religiosity and/or spirituality against depressive or posttraumatic stress symptoms among women who experienced family violence or intimate partner violence (Bradley, Schwartz, & Kaslow, 2005; Meadows, Kaslow, Thompson, & Jurkovic, 2005; Paranjape & Kaslow, 2010; Watlington & Murphy, 2006). The present findings suggest that religion plays an important role in low-income Filipino mothers' experiences as they deal with violence in their community. Several of the research previously reviewed emphasized the function of religion in meaning-making, but it should be noted that the religiosity measure used for this study assessed various components, including participation in organized religious activities, reading religious materials, praying, and beliefs

about the importance of religion (Levin et al., 1995). Each of these components may offer benefits in the way Filipino mothers deal with community violence. For example, participation in organized religious activities may broaden mothers' social support network beyond the neighbors that they interact with in their daily lives. Given that the majority of Filipinos are Catholic (Pew Research Center, 2011, Philippine Statistics Authority, 2016b), routine participation in Catholic celebrations such as attending mass with one's family may foster family closeness, which may help reduce distress associated with community violence. Having extended social networks for emotional and instrumental support might be particularly helpful to mothers in environments characterized by chronic danger. These examples illustrate how religiosity might also work as a family-level or community-level factor in protecting mothers against neighborhood risk factors. At the individual level, non-organizational or private religious activities, such as praying or watching religious programs on television, can be beneficial for mothers who may not have the time to participate in religious groups. Some of these private activities can also be done without monetary cost.

**Neighborhood cohesion served as a protective factor for fathers.** Neighborhood cohesion moderated the relation between fathers' reports of living conditions and psychological distress, such that at low and average levels of neighborhood cohesion, poorer living conditions predicted increased psychological distress, but this relation was non-significant at high levels of neighborhood cohesion. Fathers who are distressed by their living conditions, but who report high levels of cohesion, may consider their neighbors as a compensatory resource for deficiencies in their living situation. They may also have large social networks that could be sources of instrumental support (Byrnes & Miller, 2012). Indeed, low-income Filipino parents have reported relying on their neighbors not only for emotional support but also for financial

help, assistance during medical emergencies, and other basic necessities like food (Jocson & Garcia, 2017). As posited in the *pagdadala* (burden-bearing) perspective, Filipino individuals experience difficulty in dealing with burdens alone (Decenteceo, 1999). Further, a higher sense of cohesion would be beneficial for fathers who reported poorer living conditions in this study, as they are also more likely to share water and electricity with their neighbors, and are also more likely to reside in informal settlements where several families live together in one dwelling. As these fathers interact with their neighbors more closely, seeing their neighbors as more cohesive, trustworthy, and helpful could ease their distress.

**Familism had a risk-amplifying effect for fathers.** Familism did not serve as a protective factor, and instead had a risk-amplifying effect on fathers. At low levels of familism values, neighborhood disorder did not have an association with rejecting parenting, but this relation was significant at average and high levels of familism values. Fathers who endorsed high familism values and reported higher neighborhood disorder reported the highest levels of rejecting parenting. While this was an unexpected finding, it may be that fathers with the highest prioritization of family commitments are also the ones most negatively affected by neighborhood conditions that put their loved ones at risk. Consistent with the *pagdadala* (burden-bearing) model, these fathers may consider it their responsibility and burden to ensure the safety and well-being of their family and children, and daily exposure to physical and social disorder may be interpreted as a failure to fulfill that responsibility. This sense of powerlessness can bring about feelings of distress, which, as discussed previously, could manifest via rejecting parental behaviors. Although this finding was unexpected, it parallels previous results with Mexican-origin mothers and fathers, such that at high levels of familism values, neighborhood danger was associated with increases in harsh parenting strategies (White et al., 2015; White & Roosa,

2012). Findings highlight the importance of identifying contexts in which familism may serve as a risk or a protective factor, and the cultural underpinnings that may explain its role.

Additionally, it should be noted that the role of familism in an individual's well-being may change across various life stages. For example, researchers have challenged the traditional notion of *familismo* among Latino older adults, citing cases where they reported feeling sad about reduced involvement of their children in their lives and feeling worried about being a bother or a burden to their children (Ruiz & Ransford, 2012). Hence, parent age should be considered when studying familism values among parents.

### **Differences Between Mothers and Fathers**

A notable finding from this study is that mothers scored significantly higher than fathers in all the parenting variables. Specifically, mothers reported higher engagement in both warm and rejecting parenting behaviors, higher parent-adolescent communication quality, and higher levels of monitoring. These results are consistent with the frequent assertion that Filipino mothers are the primary caregivers (Alampay, 2014; Carandang, 1987; Enrile & Agbayani, 2007; Liwag et al., 1998; Medina, 2001). As found in this study, 91% of the mothers and 85% of the fathers reported that the mother is primarily responsible for taking care of their child's day-to-day activities. Other findings from this study also suggest that mothers are more present in the home compared to fathers. In particular, details about parents' employment show a significantly lower percentage of mothers that were employed full-time compared to fathers. In addition, mothers scored significantly higher than fathers on familistic behaviors, which included items such as spending time at home with family, eating meals with family, and doing things together with family and relatives. Taken together, these findings offer an important contribution, because numerous studies emphasize the role of Filipino mothers as primary caregivers despite

the lack of concrete empirical evidence supporting this claim. In addition, although there is some evidence that traditional gender conventions in parenting are changing in the Philippines (Harper, 2010; McCann-Erickson Philippines, 2006), this pattern may be limited to parents with higher education and socioeconomic status.

Among the three contextual poverty-related risk factors, community violence exposure had the strongest relation to distress among mothers, whereas living conditions had the strongest relation to distress among fathers. These results highlight the differential salience of these risk factors in relation to mothers' and fathers' psychological well-being. It was striking that community violence exposure did not have an association with psychological distress for fathers, given that they report higher levels of victimization than mothers. Although it can be argued that men may be underreporting distress, this does not appear to be the case in this study, since mothers and fathers reported statistically similar levels of psychological distress. Future studies should investigate other ways in which community violence exposure might affect men and fathers' functioning, and the implications for parenting. For example, it is possible that among fathers, community violence exposure has a stronger link with posttraumatic stress symptoms than with depression, anxiety, or general stress.

Another important finding is that the relation between poverty-related risks and rejecting parental behaviors were mediated by depression for mothers and stress for fathers. These findings indicate that neighborhood risks contribute to different psychological states for mothers and fathers. For mothers, the symptoms are in the form of depressed mood (e.g., loss of interest or pleasure, feelings of worthlessness, loss of energy), whereas for fathers, they are in the form of persistent arousal and tension (e.g., agitation, irritability, nervous energy). The implications of the psychological symptoms exhibited by mothers and fathers in relation to poverty-related

risks should be further studied, not only in terms of their influence on mothers' and fathers' parenting behaviors but also on their coping strategies, physical health, and general well-being.

Lastly, moderation analyses revealed different results for mothers and fathers, with religiosity being protective for mothers and neighborhood cohesion being protective for fathers. Moreover, strong familism values appeared to be a risk factor for fathers. With respect to religiosity, this factor appears to mitigate the relation between community violence exposure and psychological distress, which was only found among mothers. Given that community violence is a structural problem that mothers might consider as out of their control, the spiritual aspects associated with religiosity (e.g., seeking strength from a higher power) might be particularly beneficial for their well-being. It is also important to note that whereas the literature on gender and religiosity consistently find that women are more religious than men (Sullins, 2006), this gender difference did not emerge in the current sample of mostly Catholic Filipino parents. Given that fathers reported similar levels of religiosity as mothers, it cannot be concluded that religion is less important for fathers than mothers. Turning to the moderating role of neighborhood cohesion, this factor might likewise have particular significance to the relation between living conditions and psychological distress, which was only found among fathers. As discussed previously, fathers who reported poorer living conditions are more likely to share utilities and space with neighbors; thus, neighborhood cohesion could play a protective role in reducing their levels of distress. With respect to familism, this factor might have shown a moderating effect on fathers' parenting behaviors, and not on mothers' behaviors, because of the salience of the paternal role in ensuring the safety of the family from neighborhood risks.

## **Implications for Theory, Practice, and Policy**

**Theoretical implications.** This study provides insight about whether existing models derived from samples in Western developed countries can be applied to a different cultural context in a developing country. With respect to the family stress model, the general assumptions were supported such that poverty-related risks were related to parents' psychological distress, which in turn was associated with parenting behaviors. Additionally, the current results support a more contextualized version of the model, such that poverty-related risks relevant to the local context (i.e., living conditions, neighborhood disorder, and community violence exposure) directly and indirectly contributed to low-income Filipino parents' psychological distress and parenting behaviors, after accounting for the effects of socioeconomic indicators such as education and family income. With respect to the risk-protective framework, the current findings emphasize the importance of investigating cultural assets that may protect parents against risk in meaningful ways. In this regard, indigenous family systems and *pagdadala* (burden-bearing) perspectives help in placing the results in context. Religiosity, familism, and neighborhood cohesion may be considered as culturally-relevant strengths that decrease parents' *dinadala* (burden). However, these factors appear to be multifaceted, and more work should be done in theorizing about the underlying cultural factors that clarify under which conditions they could be helpful or detrimental. Collectively, results of this study illustrate the benefits of integrating indigenous perspectives to existing theoretical models and frameworks on parenting and resilience. This process of integration increases the contextual grounding of similarities and differences in results, which may not be attained by merely replicating an established framework on to a new context.

Another implication points to the importance of conducting extensive pilot work and preparation when conducting research that adapts models, methods, and measures to a new context. In this study, the pilot work and preparation involved the following steps: (a) making initial visits to low-income sites in Manila; (b) consulting with local researchers and experts in the formulation of research questions, methods, and measures; (c) conducting qualitative interviews with 20 low-income Filipino mothers on site; (d) presenting results of the qualitative study at a national conference and before a graduate class in a local university to seek feedback from Filipino audiences; (e) incorporating qualitative results and feedback in designing the data collection plan and survey measures; (f) collaborating with a host university to recruit a team of local graduate students to assist in the translation of survey measures and data collection; (g) establishing close relationships with community leaders and residents from target sites; (h) conducting pilot tests of the survey measures with low-income mothers and fathers; and (i) making several revisions to the questionnaire based on feedback from all the pilot participants. Engaging in these activities substantially helped to ensure that the study design incorporated research questions, methods, and measures that are culturally sensitive and valid in a low-income urban Filipino context.

Cultural adaptation of theories and measures is undoubtedly important; however, this process may not adequately capture the meaning behind unique parenting processes within a cultural group. The present findings highlighted interesting patterns of relations between risk, well-being, and broad groups of parenting behaviors. Whereas all the measures for parenting behaviors used in this study were adapted to the local context and yielded adequate psychometric properties, some unique aspects may not have been measured. For example, *pinagsasabihan* is a common strategy used by Filipino parents to teach their children proper behaviors and is loosely

translated to “giving reprimands” in the English language. This behavior could be interpreted as a rejecting behavior in Western contexts, but in the Filipino context, parents consider this behavior as protective (Jocson & Garcia, 2017). That is, parents who teach their children proper behaviors are viewed as responsible parents. As these types of culture-specific parenting behaviors may not be captured by existing parenting measures, there may be value in developing new indigenous theories and measures that would allow for investigation of these unique parenting practices.

With respect to broader theoretical implications, this study speaks to the utility of universal versus culturally-specific perspectives in developmental research. As previously mentioned, the findings offered insights into the meanings, pathways, processes, and protective factors that are important for a specific sample of low-income urban Filipino parents. Conducting population-specific studies has its own contribution to developmental theory, and does not necessarily undermine the value of cross-cultural studies. For example, findings from this study could enrich future cross-cultural investigations by offering culturally grounded interpretations from a Filipino perspective. By emphasizing cultural strengths (e.g., viewing religiosity as constructive rather than passive), these results can guide future researchers conducting cross-cultural research involving Filipino samples to be cautious about adopting cultural bias or ethnocentric views, especially when analyzing similarities and differences with a Western sample.

**Practical implications.** This study offers useful applications in the design of parenting, family, and community interventions. Findings showed that contextual poverty-related risks are associated with parents’ psychological distress, which, in turn, is related to parenting behaviors. In addition, religiosity and neighborhood cohesion, but not familism, showed protective effects

against risk. If interventions have the goal of enhancing parents' well-being and encourage engagement in positive parenting behaviors, then these protective factors should be taken into consideration as potential intervention targets.

The first protective factor to be considered is religiosity, which mitigated the negative effect of community violence exposure on mothers' psychological distress. As previously discussed, religiosity has several components that may contribute to maternal well-being, including participation in religious activities and organizations, prayers and spirituality, and having a high regard for religion. Programs may therefore use strategies that target each of these aspects. It might be useful to have large spaces in community centers close to the mothers' homes that could be used for religious events and functions, and to construct a quiet space in community centers that could serve as prayer rooms. These rooms may be particularly helpful in informal settlements where mothers do not have as much privacy and space in their homes. Another strategy is to disseminate information about mental health programs and parenting interventions during religious events that mothers routinely participate in, such as Sunday masses and church group gatherings. These programs may also benefit from enlisting the help of parish and religious leaders in coordinating intervention programs and recruiting parent participants.

Turning to the role of neighborhood cohesion, this factor weakened the relation between poor living conditions and fathers' rejecting behaviors toward their adolescent children. This finding further supports the usefulness of strengthening institutions and interactions at the *barangay* (community) level to improve neighborhood cohesion. One possibility is to have community advocates encourage participation of fathers in *barangay* initiatives, where they could interact with other residents in the community. As fathers typically work during weekdays, it would be ideal to hold *barangay* events during weekends. These events could offer

services and resources relevant to family welfare such as information sessions about job openings and job skills development. Field experience from this study suggests that fathers are more likely to participate in *barangay* initiatives if their spouses or partners accompany them. Therefore, *barangay* leaders could design programs that would encourage the participation of both mothers and fathers. On a more general note, programs and interventions designed for low-income families should not only prioritize family welfare, but also incorporate strategies to reduce conflict among neighbors and enhance community cohesion.

Familism did not emerge as a protective factor, and instead showed a risk-amplifying effect for fathers, such that those who reported high familism values and higher levels of neighborhood disorder had the highest scores on rejecting parenting behaviors. As previously discussed, a higher use of rejection by fathers endorsing higher familism values could be a manifestation of stress brought about by a failure to protect their family from neighborhood risks. Given that family-oriented attitudes are deeply ingrained in Filipino culture (Alampay, 2014; Morillo et al., 2013), it would be an unwarranted step to try to change Filipino fathers' familism values. Moreover, results from this study show that familism values were correlated with higher levels of warm parenting, communication, and monitoring for both mothers and fathers, suggesting that familism values may facilitate adaptive parenting behaviors as well. If the goal is to reduce fathers' likelihood of engaging in rejecting parenting behaviors, intervention programs may target the other factors shown in this study to increase likelihood of its use, such as neighborhood disorder and psychological distress. *Barangay* leaders play an important role in reducing neighborhood physical and social disorder, as they are in charge of implementing community-level initiatives. They could conduct programs that promote best practices in sanitation and health, organize clean-up campaigns, and increase security measures through

deployment of community peacekeepers (*barangay tanod*). There should also be highly coordinated efforts from relevant government agencies and *barangays* to implement programs that could improve the mental health of both mothers and fathers.

Whereas this study highlights protective factors that enhance mothers' and fathers' resilience in the context of risk, the findings do not devalue structural and larger-scale intervention efforts to improve the lives of low-income parents. As found in this study, poor living conditions, community violence exposure, and neighborhood disorder have significant direct and indirect associations with rejecting parenting behaviors through their relations with parents' psychological distress. Risk reduction could be the most effective way to enhance parents' psychological health and parenting, as this strategy targets the root problem and could therefore prevent the sequelae of negative outcomes associated with these risk factors. Thus, equal amounts of effort should be invested in improving parents' capacity for resilience as well as supporting larger-scale efforts toward improving living standards, lowering crime and violence, and reducing disorder in low-income neighborhoods. To the extent that enhanced parental psychological well-being and behaviors extend to children's outcomes, these integrated efforts could help facilitate healthy family functioning on the whole.

**Policy implications.** Several of the aforementioned practical implications underscore the role of *barangays* in implementing initiatives that could benefit low-income parents and families. There should be policies in place to ensure the steady flow of funding and resources from the government to these smallest community sectors, particularly in high-risk areas. For example, the Bottom-up Budgeting (BuB) program allows *barangays* to pick projects of their choosing to implement with funds allotted from the national budget (Department of Budget and Management, 2016). This program aims to improve governance at the *barangay* level by

including *barangay* leaders in the planning and budgeting process and enabling them to prioritize projects that are most needed by their residents. Efforts should be directed toward the effective management, implementation, monitoring, and evaluation of these small-scale projects, as well as larger-scale and nationwide poverty reduction programs, such as the government's comprehensive conditional cash transfer program (i.e., Pantawid Pamilyang Pilipino Program).

Beyond general policy implications, the results of this study are relevant to the role of community violence exposure and neighborhood disorder as risk factors within the recent political context in the Philippines. In May of 2016, the Philippines elected a new president, Rodrigo Duterte, who ran on a campaign to eradicate illegal drugs in the country within the first six months of his term. Under the new administration, the Philippine National Police launched an anti-illegal drugs campaign plan that included operations where the police conducted house-to-house visits to find drug pushers and users and convince them to surrender. Reports indicate that from 2016 to 2017, murder and homicide cases increased by up to 23 percent, and 3,264 individuals died in police operations related to the government's aggressive anti-illegal drugs campaign plan (Philippine National Police, 2017). These reports are alarming, given the current findings that highlight the negative effects of community violence exposure and neighborhood disorder on parents' psychological well-being and parenting behaviors. Whereas the goal of the anti-illegal drugs campaign was to reduce crime, it appears that the campaign itself is inadvertently increasing violence in communities. Results of this study show that there are protective factors that may foster resilience in the context of violence and disorder. However, this should not deflect attention from larger socioeconomic structures and institutional policies that contribute to these conditions in the first place. Thus, along with a focus on enhancing resilience at the individual, family, and community level, there should be continuous scrutiny of

actions and policies at the national level that may perpetuate violence and disempowerment, particularly among the poor.

### **Limitations**

Several limitations of this study should be noted. As with all cross-sectional data, conclusions cannot be made about the direction of the relations observed. Some researchers raise caution against using mediation analyses with cross-sectional data because of the lack of multiple time points to establish temporal sequence of pathways from the independent variable, to the mediator, to the dependent variable (Mackinnon, 2008). However, other researchers argue that mediation analysis can be done with cross-sectional data given a strong theoretical model that supports the hypothesized pathways (Collins & Graham, 2002). In some cases, observations that have shorter time lags may even provide a clearer illustration of the theorized process than observations that spaced too far apart (Collins & Graham, 2002). In this study, the data was cross-sectional, but the family stress model provided a robust theoretical framework regarding the expected relations between poverty-related risks, parental distress, and parenting behaviors (Conger et al., 2010). Moreover, it was hypothesized that the risk conditions examined in this study (i.e., poor living conditions, neighborhood disorder, community violence exposure), may cause instantaneous distress on parents, which in turn, may have immediate implications on their parenting behaviors. Nonetheless, longitudinal analyses would provide a more robust test of the proposed mediated relations between poverty-related risks, psychological distress, and parenting behaviors.

Another limitation is that parent self-reports were used to measure all variables under investigation. This could have contributed to overestimation of correlations. For instance, distressed parents may be more likely to view their environment negatively, which could lead to

higher reports in the risk measures. Multi-source data, particularly on neighborhood-level variables, could help in addressing this limitation in future studies. In addition, collecting child-reported data on parenting behaviors may also address potential bias in parents' responding.

Next, this study examined patterns of relations between broadly measured constructs of risk, psychological well-being, parenting behaviors, and protective factors. Interesting and meaningful patterns of relations emerged; however, including analyses of the variable subscales could have enhanced understanding of potentially distinct effects that risk factors have on particular components of well-being and parenting. As an example, it was found that the relation between neighborhood disorder and rejecting behaviors were mediated by depression for mothers and stress for fathers, despite the lack of significant results for the overall distress measure. In this study, the sample size limited the number of parameters that could be examined in the mediation and moderation analyses. Future studies with larger samples would have greater power to include an investigation of the subscales for community violence exposure (witnessing violence, personal victimization), neighborhood disorder (physical disorder, social disorder), parental monitoring (solicitation of information versus rule-setting), and religiosity (subjective religiosity, religious involvement, spirituality). These subscales could also be examined using a latent-variable structural equation modeling approach that includes an evaluation of the measurement model.

It should be emphasized that several of the measures used for this study were adapted from existing measures derived from Western samples. As previously discussed, they may not have included aspects of risk, well-being, and parenting that are unique to Philippine culture. In addition, they may show a different pattern of clustering of items compared to those in established subscales in these standard measures. For example, Filipino mothers may be seen as

both warm and controlling (Alampay, 2014), so it is possible that some items in the warmth subscale may cross-load to another subscale indicating control. These issues underscore the potential benefits of developing indigenous measures instead of adapting existing standard measures to the local context. Scholars emphasize the importance of establishing measurement equivalence when conducting a study that includes samples from different cultures, and this is becoming increasingly important as developmental research becomes more global. However, for studies that focus on one particular culture, such as this dissertation, using locally-developed measures that capture unique and culturally-specific aspects of the variables of interest may yield meaningful findings that could enrich local parenting theories. In this process, a community-based participatory approach in which local informants and consultants take part in measurement design would be desirable.

This study also has limitations with respect to developmental applications. Although one of the goals of the study is to shed light on the parenting of adolescents in a low-income Filipino context, the focus of the investigation was on the relations between risk, parental well-being, parenting behaviors, and protective factors. In accordance with the family stress model, these factors were expected to have implications for adolescent outcomes, but these were not measured in the study. Moreover, this study did not include an examination of whether the moderated and mediated relations vary as a function of child age. For example, it would be interesting to examine how the effect of living conditions on parents changes across adolescence, given that more children work and contribute to the household income as they grow older, particularly in low-income families (Alampay, 2014).

Finally, there are limitations pertaining to the context and timing in which data for this study were collected. The results of this study cannot necessarily be generalized to all low-

income settings in the Philippines, because data were collected in only three *barangays* in Manila, which is an urban industrialized setting. Among the 17 regions in the country, Metro Manila has the lowest poverty incidence at 7% (Juan-Albacea, 2009; National Statistical Coordination Board, 2009). In other regions such as the Autonomous Region of Muslim Mindanao (ARMM), the poverty incidence is as high as 55%, and people who live in these regions are exposed to vastly different experiences of conflict, violence, and living conditions. Related to this point is the relevance of the findings given the timing in which the data for this study was collected, which was prior to the reported spike in killings related to the new administration's aggressive campaign against illegal drugs. As murder cases have increased within a year after data collection was completed (Philippine National Police, 2017), the results for this study may not extend to the current context. For example, studies have shown some protective factors have a threshold or protective-reactive effect, such that they are only protective at low levels of risk (Ceballo & McLoyd, 2002; Luthar et al., 2000; Sullivan et al., 2004; Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011). Therefore, it is possible that at higher levels of neighborhood risk and community violence exposure, the protective effects of religiosity for mothers and neighborhood cohesion for fathers would be diminished.

## **Future Directions**

There are several exciting future directions stemming from the results of this dissertation. With regard to moderation effects, further analyses could clarify if there are variations in the protective effects found in this study according to level of risk exposure (Luthar et al., 2000). Particularly, the interaction plot for familism suggests a protective-reactive effect such that it may have protective effects, but only at low levels of neighborhood disorder. The interaction plot for neighborhood cohesion suggests an opposite protective-enhancing effect such that it may

be protective only at high levels of risk in living conditions. As discussed in previous studies, familism and neighborhood cohesion can serve as both risk and protective factors depending on the context relating to the variables being considered (Jocson & Garcia, 2017, Stein et al., 2014). Additional analyses of these threshold effects could shed light on their potentially multifaceted protective role in parents' functioning, and their implications for intervention.

One of the unique aspects of this study's data set is that the majority of the parents were couples from the same family. Consistent with a family systems perspective, the Filipino family functions as a whole, such that stresses experienced by one family member may have a spillover or crossover effect on another person or relationship in the family system (Carandang, 1987). Since experiencing economic stress brings additional burdens to parenting, it is important to understand how low-income couples affect each other's psychological states and parenting practices. A future direction for research is to conduct dyadic analyses examining crossover effects between parents' distress and their partners' psychological well-being and parenting behaviors.

This study coincides with a volatile political situation in the Philippines that underscores the need for more empirical evidence on the effects of neighborhood risks and community violence exposure on individuals, families, and children. The current study presents cross-sectional evidence on the association between community violence exposure and maternal psychological distress, and between neighborhood disorder, psychological distress, and rejecting parental behaviors for both mothers and fathers. More studies are needed to clarify long-term effects of these community-level risks on parents, and whether these effects extend to children, adolescents, and other aspects of family functioning.

Longitudinal studies on the effects of community risk factors on children and adolescents' functioning would benefit from using a multilevel approach that considers not just parent-related pathways but also examines socio-cognitive, biological, and neurological mechanisms. For example, a study on urban elementary school children in the US found that community violence exposure increases children's aggressive behaviors through both imitation of violence and higher normative beliefs approving aggression (Guerra, Rowell Huesmann, & Spindler, 2003). Other studies suggest that children's exposure to trauma, violence, and socioeconomic stressors are related to increased activation in the hypothalamic-pituitary-adrenal axis and the brain's prefrontal cortex (Gibson, Morris, & Beaver, 2009; Sheridan, Sarsour, Jutte, D'Esposito, & Boyce, 2012), which are implicated in stress regulation and executive function, respectively. Although research on poverty involving multilevel integration has advanced significantly in the past decade, these studies have been done mostly with North American and European samples, raising questions about their applicability to developing countries.

In terms of developmental implications, future studies should investigate the mechanisms through which contextual poverty-related risks are related to parents' and children's functioning across different stages of development. With longitudinal data, researchers could examine growth curve models that look at how parental and familial factors contribute to increases and declines in children's risk exposure and problem behaviors as they transition into adolescence and young adulthood. Another important topic that may have implications for low-income families in the Philippines is parents' and youth's desensitization to violence across time (Kennedy & Ceballo, 2016; Ng-Mak, Salzinger, Feldman, & Stueve, 2004).

Along with a multi-level, developmental approach, future studies should employ multi-method strategies. In this study, pilot qualitative interviews with mothers helped significantly in

the design of research questions, recruitment and data collection strategies, and measures. In-depth qualitative interviews with low-income fathers and adolescents could provide supporting evidence for some of the proposed arguments in this study. In addition, a major limitation in the existing literature on community violence exposure is that almost all studies have relied on retrospective reports of experiences with violence (Margolin, Vickerman, Oliver, & Gordis, 2010). Daily diary methods can address this limitation by assessing short-term variations or day-to-day changes in parents' and adolescents' reactions to violent events. Using this method, researchers can investigate how particular characteristics of violent events or neighborhood dangers relate to parents' and adolescents' daily functioning and psychological well-being. Results from diary studies can provide new and unique data about the temporal associations between parents' and adolescents' risk exposure and functioning.

One of the critiques of the existing literature on low-income families and children is the heavy emphasis on reduction of maladaptive functioning or negative behaviors (Cabrera, 2013; McLoyd et al., 2013). Prevention of undesirable outcomes is no doubt critical; however, there should be equal emphasis on investigating factors that promote positive functioning and behaviors in the context of risk. Scholars in the field of resilience have started to recognize that positive adaptation among vulnerable individuals mean something more than just the absence of problems (Kim-Cohen & Gold, 2009; Wright, Masten, & Narayan, 2013). In addition, the development of competent functioning may be characterized by different pathways and mechanisms than those implicated in maladaptive behaviors. Therefore, future researchers should consider the processes that contribute to strengths, competencies, and other aspects of positive development among economically disadvantaged families. A next step for analyses is to investigate the predictors of positive well-being variables such as hope and optimism, and

examine if they mediate the association between risk and parenting behaviors in ways similar to stress-related pathways.

Finally, a more comprehensive perspective on poverty, family processes, and child development would be achieved if these findings were integrated with data from other contexts and cultures. As parental attitudes, belief systems, and parenting behaviors are largely shaped by culturally shared values, goals, and customs (Super & Harkness, 2002), a culture-comparative approach would be warranted to identify universal aspects that should be key components of intervention programs that aim to enhance parenting and child development in resource-poor contexts. This could be achieved by increasing international collaborations that study processes related to poverty and resilience across a wide range of cultures.

In sum, this dissertation investigated direct, mediated, and moderated relations between contextual poverty-related risks, psychological distress, and parenting behaviors in a low-income urban Filipino sample. Mediation analyses showed that neighborhood disorder was associated with rejecting behaviors through depression for mothers and stress for fathers. In addition, poor living conditions were associated with lower levels of warm parenting for fathers through stress. Moderation analyses showed that religiosity was a protective factor that reduced the association between community violence exposure and maternal distress, whereas neighborhood cohesion was a protective factor that reduced in the association between poor living conditions and paternal distress. Familism did not serve as a protective factor, and instead amplified the negative effect of neighborhood disorder on rejecting behaviors for fathers. The results highlight culturally-relevant risk and protective factors in mothers' and fathers' psychological well-being and parenting behaviors, raise theoretical implications that could enhance scholarship on poverty

and parenting, and offer practical and policy-related applications that inform interventions targeting parents' functioning in a low-income urban Filipino context.

## TABLES

Table 1  
*Participant Characteristics by Site (N = 200)*

	Overall N = 200	Marikina n = 66	Pasig n = 74	Quezon City n = 60	$\chi^2$ or F score	Range
	% or M (SD)	% or M (SD)	% or M (SD)	% or M (SD)		
Female	58	56	60	58	0.17	
Age (years)	43.19 (8.38)	43.64 (8.11)	43.49 (7.56)	42.33 (9.62)	0.45	27–70
Education <sup>a</sup>	2.51 (1.03)	2.42 (1.12)	2.74 (0.98)	2.30 (0.93)	3.47*	0–5
Employment						
Full time	35	30	27	45	6.47	
Part time	30	35	30	23		
Not employed	35	35	43	32		
Biological parent	94	94	99	87	15.60	
Marital status						
Married	71	59	72	82	11.29	
Single with live-in partner	23	33	19	17		
Income classification <sup>b</sup>						
Poor	49	42	39	50	2.41	
Low income	40	44	43	40		
Lower middle income	11	14	18	10		

	Overall <i>N</i> = 200	Marikina <i>n</i> = 66	Pasig <i>n</i> = 74	Quezon City <i>n</i> = 60	$\chi^2$ or <i>F</i> score	Range
	% or <i>M</i> ( <i>SD</i> )					
Child age (years)	14.21 (1.66)	14.50 (1.87)	13.81 (1.21)	14.37 (1.81)	3.50*	12–18
Child female	56	62	54	50		
Number of children	4.02 (1.94)	3.91 (1.94)	4.01 (2.06)	4.15 (1.78)	0.24	1–10
Household size	6.81 (2.75)	6.83 (3.04)	6.70 (2.76)	6.92 (2.42)	0.10	3–17

Note. <sup>a</sup>0 = no education, 1 = some elementary, 2 = some high school, 3 = high school diploma, 4 = some college, 5 = college degree,

<sup>b</sup>poor = earning less than PhP 7890/USD 167 per month, low income = earning PhP 7890–15780/ USD 167–335 per month, lower middle income = earning PhP15780–31560/USD 335–671 per month. These income categories are used for descriptive purposes only; a different family income measure was used for analyses. \**p* < .05.

Table 2

*Bivariate Correlations and Descriptive Statistics for Key Study Variables for Mothers (N = 116)*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Poor living conditions	—											
2. Neighborhood disorder	.35**	—										
3. Community violence	.31**	.49**	—									
4. Distress	.31**	.32**	.36**	—								
5. Warmth	-.09	-.12	-.17	-.07	—							
6. Rejection	.16	.26**	.08	.23*	-.02	—						
7. Communication	-.09	-.11	.02	-.03	.50**	-.25**	—					
8. Monitoring <sup>a</sup>	-.14	-.10	.10	.01	.44**	-.04	.56**	—				
9. Religiosity <sup>a</sup>	-.16	-.27**	-.13	-.18	.36**	-.17*	.48**	.33**	—			
10. Familism values	-.08	-.13	-.14	.02	.48**	-.01	.33**	.31**	.39**	—		
11. Familism behaviors	-.15	-.04	.09	.02	.22*	-.17	.38**	.38**	.26**	.30**	—	
12. Neighborhood cohesion	.07	-.21*	.03	-.02	.15	-.03	.12	.21*	.37**	.20*	.09	—
<i>M</i>	1.36	2.50	10.47	16.95	4.59	3.09	3.81	0.00	0.00	4.81	4.36	18.23
<i>SD</i>	1.39	0.49	12.50	9.99	0.36	0.84	0.72	1.75	1.72	0.36	0.49	4.17
<i>Minimum</i>	0.00	1.09	0.00	0.00	3.33	1.00	1.15	-7.75	-4.35	2.82	2.83	5.00
<i>Maximum</i>	4.00	3.82	61.00	43.00	5.00	4.86	5.00	2.26	3.88	5.00	5.00	25.00

Note. <sup>a</sup>Mean scores on the subscales for this variable were standardized and summed.\**p* < .05. \*\**p* < .01.

Table 3

*Bivariate Correlations and Descriptive Statistics for Key Study Variables for Fathers (N = 84)*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Poor living conditions	—											
2. Neighborhood disorder	.32**	—										
3. Community violence	.10	.39**	—									
4. Distress	.41**	.24*	.13	—								
5. Warmth	-.28**	-.04	.06	-.31**	—							
6. Rejection	.24*	.38**	.10	.36**	-.08	—						
7. Communication	.02	.04	.07	.02	.30**	-.22**	—					
8. Monitoring <sup>a</sup>	.00	-.01	.12	-.02	.25*	-.13	.55**	—				
9. Religiosity <sup>a</sup>	-.03	-.11	-.04	.03	.25*	-.12	.17	.37**	—			
10. Familism values	-.11	-.05	-.03	-.09	.42**	-.03	.42**	.38**	.40**	—		
11. Familism behaviors	-.17	-.16	-.08	-.11	.38**	-.20	.42**	.43**	.51**	.56**	—	
12. Neighborhood cohesion	-.10	-.29**	-.16	-.10	.13	-.12	.03	.09	.14	.12	.08	—
<i>M</i>	1.32	2.40	14.21	15.19	4.40	2.71	3.38	0.00	0.00	4.63	4.17	17.83
<i>SD</i>	1.32	0.50	14.15	9.76	0.41	0.72	0.59	1.78	1.72	0.41	0.52	3.47
<i>Minimum</i>	0.00	1.32	0.00	0.00	2.83	1.00	1.92	-4.41	-3.40	3.00	3.00	6.00
<i>Maximum</i>	4.00	3.45	70.00	40.00	5.00	4.43	5.00	3.59	3.74	5.00	5.00	25.00

Note. <sup>a</sup>Mean scores on the subscales for this variable were standardized and summed.

\**p* < .05. \*\**p* < .01.

**Table 4**  
*Multiple Regression Analyses Predicting Psychological Distress and Parenting Behaviors*

Dependent Variable	Predictors	Mothers		Fathers	
		$\beta$	B (SE)	$\beta$	B (SE)
Psychological distress	Pasig City dummy	.01	0.12 (2.03)	.04	0.72 (2.16)
	Quezon City dummy	-.07	-1.41 (2.07)	.01	0.18 (2.83)
	Parent age	-.03	-0.04 (0.12)	.22	0.24 (0.13)
	Parent education <sup>a</sup>	.04	0.36 (0.90)	-.08	0.74 (0.96)
	Family income <sup>b</sup>	-.15	-0.58 (0.31)	-.05	-0.18 (0.37)
	Living conditions risk index	.15	1.03 (0.72)	.30**	2.25 (0.78)
	Neighborhood disorder	.17	3.55 (2.04)	.12	2.29 (2.60)
	Community violence exposure	.24*	0.19 (0.09)	.11	0.08 (0.08)
	Psychological distress				
Warmth	Pasig City dummy	-.09	-0.07 (0.08)	-.02	-0.01 (0.09)
	Quezon City dummy	-.00	-0.00 (0.09)	-.31*	-0.25 (0.11)
	Parent age	-.02	-0.00 (0.01)	.16	0.01 (0.00)
	Parent education <sup>a</sup>	.09	0.03 (0.03)	.14	0.05 (0.05)
	Family income <sup>b</sup>	.01	0.00 (0.01)	-.12	-0.02 (0.02)
	Living conditions risk index	-.04	-0.01 (0.03)	-.21*	-0.06 (0.03)
	Neighborhood disorder	-.06	-0.05 (0.08)	.19	0.15 (0.12)
	Community violence exposure	-.15	-0.00 (0.00)	.17	0.01 (0.00)
	Psychological distress	.01	0.00 (0.00)	-.27*	-0.01 (0.01)
Rejection	Pasig City dummy	.17	0.29 (0.19)	.19	0.28 (0.17)
	Quezon City dummy	.05	0.09 (0.19)	.06	0.09 (0.19)
	Parent age	-.07	-0.01 (0.01)	.04	0.00 (0.01)
	Parent education <sup>a</sup>	-.21*	-0.18 (0.09)	.12	0.08 (0.07)
	Family income <sup>b</sup>	.14	0.04 (0.03)	-.03	-0.01 (0.03)
	Living conditions risk index	.09	0.06 (0.06)	.11	0.06 (0.06)
	Neighborhood disorder	.23*	0.40 (0.19)	.32*	0.46 (0.18)
	Community violence exposure	-.12	-0.01 (0.01)	-.03	-0.00 (0.01)
	Psychological distress	.19*	0.02 (0.01)	.27**	0.02 (0.01)
Communication	Pasig City dummy	-.15	-0.21 (0.14)	.11	0.14 (0.18)
	Quezon City dummy	-.13	-0.20 (0.19)	-.36**	-0.46 (0.17)
	Parent age	-.05	-0.01 (0.01)	-.04	-0.00 (0.01)
	Parent education <sup>a</sup>	.33***	0.24 (0.07)	-.06	-0.03 (0.06)
	Family income <sup>b</sup>	-.06	-0.02 (0.02)	-.08	-0.02 (0.03)
	Living conditions risk index	-.06	-0.03 (0.05)	.03	0.01 (0.06)
	Neighborhood disorder	-.10	-0.15 (0.15)	.23	0.27 (0.17)
	Community violence exposure	.09	0.01 (0.01)	.10	0.00 (0.00)
	Psychological distress	-.03	-0.00 (0.01)	-.00	-0.00 (0.01)

Dependent Variable	Predictors	Mothers		Fathers	
		$\beta$	B (SE)	$\beta$	B (SE)
Monitoring	Pasig City dummy	-.10	-0.35 (0.36)	.00	0.01 (0.50)
	Quezon City dummy	-.15	-0.56 (0.42)	-.15	-0.58 (0.51)
	Parent age	-.04	-0.01 (0.03)	.13	0.03 (0.03)
	Parent education <sup>a</sup>	.27**	0.48 (0.18)	-.06	-0.09 (0.18)
	Family income <sup>b</sup>	.03	0.02 (0.05)	.10	0.07 (0.07)
	Living conditions risk index	-.13	-0.15 (0.12)	.18	0.24 (0.18)
	Neighborhood disorder	-.11	-0.38 (0.32)	-.07	-0.24 (0.41)
	Community violence exposure	.19*	0.03 (0.01)	.20	0.03 (0.02)
	Psychological distress	.03	0.00 (0.01)	-.17	-0.03 (0.02)

Note. <sup>a</sup>0 = no education, 1 = some elementary, 2 = some high school, 3 = high school diploma, 4 = some college, 5 = college degree.

<sup>b</sup>Gross annual family income, values are coded as follows: 1 = no income; 2 = up to PhP 24,000; 3 = PhP 24,000 – 28,000; 4 = PhP 48,000 – 72,000; 5 = PhP 72,000 – 96,000; 6 = PhP 108,000 – 132,000; 7 = PhP 132,000 – 150,000; 8 = PhP 150,000 – 186,000; 9 = PhP 186,000 – 228,000; 10 = PhP 228,000 – 282,000; 11 = PhP 282,000 – 378,000; 12 = PhP 378,000 – 498,000; 13 = PhP 498,000 – 726,000; 14 = PhP 726,000 – 1,000,000; 15 = over PhP 1,000,000.

$\beta$  = standardized coefficient, B = unstandardized coefficient, SE = standard error.

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

Table 5

*Hierarchical Regression Analysis Predicting Mothers' Psychological Distress from Community Violence Exposure and Religiosity (N = 116)*

Predictor	$\Delta R^2$	$\beta$	B (SE)
Step 1	.07		
Pasig dummy		-.11	-2.24 (2.23)
Quezon City dummy		.02	0.42 (2.34)
Parent age		-.14	-0.18 (0.12)
Parent education <sup>a</sup>		-.02	-0.16 (1.01)
Family income <sup>b</sup>		-.15	-0.59 (0.37)
Step 2	.12**		
Pasig dummy		-.03	-0.67 (2.15)
Quezon City dummy		-.02	-0.34 (2.22)
Parent age		-.05	-0.06 (0.12)
Parent education <sup>a</sup>		.01	0.13 (0.95)
Family income <sup>b</sup>		-.17	-0.66 (0.35)
CVE		.33**	0.27 (0.07)
Religiosity		-.12	-0.70 (0.52)
Step 3	.05*		
Pasig dummy		-.04	-0.77 (2.10)
Quezon City dummy		-.03	-0.59 (2.17)
Parent age		-.05	-0.07 (0.12)
Parent education <sup>a</sup>		.02	0.22 (0.93)
Family income <sup>b</sup>		-.18*	-0.71 (0.35)
CVE		.33***	0.26 (0.07)
Religiosity		-.09	-0.54 (0.51)
CVE × Religiosity		-.22*	-0.08 (0.03)
Total $R^2$	.23***		

Note. CVE = community violence exposure. Total  $F(8,107)$  for Step 3 = 3.93\*\*\*, Adjusted  $R^2$  = .17.

<sup>a</sup>0 = no education, 1 = some elementary, 2 = some high school, 3 = high school diploma, 4 = some college, 5 = college degree.

<sup>b</sup>Gross annual family income, values are coded as follows: 1 = no income; 2 = up to PhP 24,000; 3 = PhP 24,000 – 28,000; 4 = PhP 28,000 – 48,000; 5 = PhP 48,000 – 72,000; 6 = PhP 72,000 – 96,000; 7 = PhP 96,000 – 120,000; 8 = PhP 120,000 – 150,000; 9 = PhP 150,000 – 186,000; 10 = PhP 186,000 – 228,000; 11 = PhP 228,000 – 282,000; 12 = PhP 282,000 – 378,000; 13 = PhP 378,000 – 498,000; 14 = PhP 498,000 – 726,000; 15 = over PhP 726,000 – 1,000,000.

$\beta$  = standardized coefficient, B = unstandardized coefficient, SE = standard error.

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

Table 6  
*Hierarchical Regression Analysis Predicting Fathers' Psychological Distress from Living Conditions Risk Index and Neighborhood Cohesion (N = 84)*

Predictor	$\Delta R^2$	$\beta$	B (SE)
Step 1	.13*		
Pasig dummy		-.12	-2.35 (2.49)
Quezon City dummy		.08	1.62 (2.60)
Parent age		.26*	0.28 (0.12)
Parent education <sup>a</sup>		-.12	-1.10 (1.07)
Family income <sup>b</sup>		-.02	-0.08 (0.43)
Step 2	.09*		
Pasig dummy		.01	0.14 (2.55)
Quezon City dummy		.08	1.70 (2.56)
Parent age		.21	0.23 (0.12)
Parent education <sup>a</sup>		-.07	-0.63 (1.04)
Family income <sup>b</sup>		.01	0.02 (0.42)
LCRI		.34**	2.54 (0.85)
Neighborhood cohesion		-.01	0.02 (0.31)
Step 3	.04*		
Pasig dummy		.04	0.86 (2.52)
Quezon City dummy		.10	2.22 (2.51)
Parent age		.18	0.20 (0.12)
Parent education <sup>a</sup>		-.07	-0.63 (1.02)
Family income <sup>b</sup>		-.02	-0.09 (0.41)
LCRI		.32**	2.35 (0.84)
Neighborhood cohesion		.02	0.04 (0.30)
LCRI × Neighborhood cohesion		-.21*	-0.40 (0.19)
Total $R^2$	.27**		

Note. LCRI = living conditions risk index. Total  $F(8,75)$  for Step 3 = 3.42\*\*, Adjusted  $R^2$  = .19.

<sup>a</sup>0 = no education, 1 = some elementary, 2 = some high school, 3 = high school diploma, 4 = some college, 5 = college degree.

<sup>b</sup>Gross annual family income, values are coded as follows: 1 = no income; 2 = up to PhP 24,000; 3 = PhP 24,000 – 28,000; 4 = PhP 28,000 – 48,000; 5 = PhP 48,000 – 72,000; 6 = PhP 72,000 – 96,000; 7 = PhP 96,000 – 120,000; 8 = PhP 120,000 – 150,000; 9 = PhP 150,000 – 186,000; 10 = PhP 186,000 – 228,000; 11 = PhP 228,000 – 282,000; 12 = PhP 282,000 – 378,000; 13 = PhP 378,000 – 498,000; 14 = PhP 498,000 – 726,000; 15 = over PhP 726,000.

$\beta$  = standardized coefficient,  $B$  = unstandardized coefficient, SE = standard error.

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

Table 7  
*Hierarchical Regression Analysis Predicting Fathers' Rejection from Neighborhood Disorder and Familism Values*  
(N = 84)

Predictor	$\Delta R^2$	$\beta$	B (SE)
Step 1	.06		
Pasig dummy		-.05	0.08 (0.19)
Quezon City dummy		.21	0.33 (0.20)
Parent age		.17	0.01 (0.01)
Parent education <sup>a</sup>		.11	0.07 (0.08)
Family income <sup>b</sup>		.03	0.01 (0.03)
Step 2	.12**		
Pasig dummy		.14	0.21 (0.19)
Quezon City dummy		.02	0.04 (0.21)
Parent age		.12	0.01 (0.01)
Parent education <sup>a</sup>		.08	0.05 (0.08)
Family income <sup>b</sup>		-.09	-0.02 (0.03)
ND		.42**	0.60 (0.18)
Familism values		-.05	-0.08 (0.19)
Step 3	.05*		
Pasig dummy		.17	0.25 (0.18)
Quezon City dummy		.08	0.13 (0.21)
Parent age		.12	0.01 (0.01)
Parent education <sup>a</sup>		.07	0.05 (0.08)
Family income <sup>b</sup>		-.05	-0.01 (0.03)
ND		.37**	0.52 (0.18)
Familism values		.03	0.05 (0.20)
ND × Familism values		.23*	-0.83 (0.39)
Total $R^2$	.22*		

Note. ND = neighborhood disorder. Total  $F(8,75)$  for Step 3 = 2.65\*, Adjusted  $R^2$  = .14.

<sup>a</sup>0 = no education, 1 = some elementary, 2 = some high school, 3 = high school diploma, 4 = some college, 5 = college degree.

<sup>b</sup>Gross annual family income, values are coded as follows: 1 = no income; 2 = up to PhP 24,000; 3 = PhP 24,000 – 28,000; 4 = PhP 28,000 – 72,000; 5 = PhP 72,000 – 96,000; 6 = PhP 96,000 – 132,000; 7 = PhP 132,000 – 150,000; 8 = PhP 150,000 – 186,000; 9 = PhP 186,000 – 228,000; 10 = PhP 228,000 – 282,000; 11 = PhP 282,000 – 378,000; 12 = PhP 378,000 – 498,000; 13 = PhP 498,000 – 726,000; 14 = PhP 726,000 – 1,000,000; 15 = over PhP 1,000,000.

$\beta$  = standardized coefficient, B = unstandardized coefficient, SE = standard error.

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

Table 8

*Comparison of Mother-Father Dyads (N = 81)*

Variable	Mothers		Fathers		Mean Difference	<i>r</i>	<i>t</i>	$\chi^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
<b>Demographics</b>								
1. Age	42.49	8.66	44.48	8.67	-1.99	.75***	-2.90**	
2. Education <sup>a</sup>	2.38	1.02	2.60	1.09	-0.22	.45***	-1.81	
3. Employment								54.13***
Full time	16%		63%					
Part time	33%		26%					
Not employed	52%		12%					
<b>Risk Factors</b>								
4. Living conditions risk index	1.43	1.46	1.28	1.31	0.15	.72***	1.27	
5. Neighborhood disorder	2.52	0.51	2.40	0.51	0.12	.47***	2.06*	
6. Community violence exposure	11.06	13.63	14.25	14.20	-3.18	.34**	-1.79	
Witnessing violence	9.63	11.40	11.56	11.34	-1.93	.28*	-1.27	
Personal victimization	1.43	3.11	2.69	3.51	-1.26	.33**	-2.95**	
<b>Psychological Well-being</b>								
7. Psychological distress	16.72	10.30	14.85	9.65	1.86	.04	1.22	
<b>Parenting Behaviors</b>								
8. Warmth	4.57	0.38	4.40	0.42	0.17	.09	2.87**	
9. Rejection	3.15	0.84	2.70	0.73	0.45	.29**	4.32***	
10. Communication	3.75	0.75	3.30	0.60	0.36	.25*	3.82***	
11. Monitoring								
Solicitation of information	1.71	0.37	1.44	0.95	0.27	.08	4.48***	
Rule-setting	1.97	0.73	1.55	0.63	0.42	.16	4.30***	

Variable	Mothers		Fathers		Mean Difference	<i>r</i>	<i>t</i>	$\chi^2$				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>								
Protective Factors												
12. Religiosity												
Religious activities	2.71	0.68	2.62	0.59	0.09	.04	0.99					
Praying	3.99	0.99	3.70	1.01	0.29	.04	1.85					
Perceived religiosity	2.88	0.73	2.98	0.67	-0.10	.15	-0.97					
13. Familism values	4.66	0.37	4.56	0.42	0.10	.13	1.79					
14. Familism behaviors	4.40	0.51	4.18	0.52	0.21	.24*	3.00**					
15. Neighborhood cohesion	18.01	4.35	17.79	3.52	0.22	.05	0.37					

Note. <sup>a</sup>0 = no education, 1 = some elementary, 2 = some high school, 3 = high school diploma, 4 = some college, 5 = college degree.

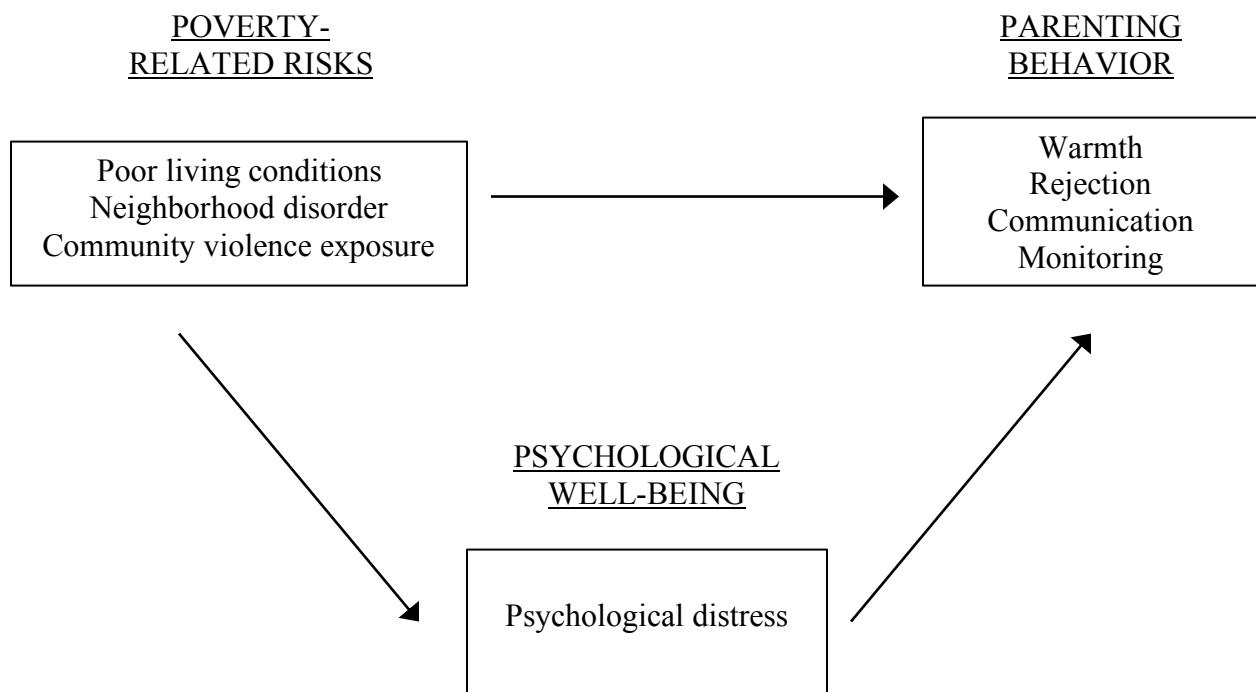
\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

Table 9

*Percentage of Mothers (n = 116) and Fathers (n = 84) Reporting Exposure to Specific Types of Community Violence*

Type of Violence	% Mothers      Fathers	
	Mothers	Fathers
<b>Witnessing Violence</b>		
Seen someone else get hit, slapped, or punched	54	63
Seen someone get chased	35	59
Seen other people using or selling illegal drugs	47	57
Seen someone carrying or holding a gun or knife	46	56
Heard sound of gunfire	34	49
Seen someone else getting beaten up or mugged	35	45
Seen someone else being threatened with physical harm	41	44
Seen a seriously wounded person after an incident of violence	35	44
Seen someone get shot with a gun	20	38
Seen someone being attacked or stabbed with a weapon	25	33
Seen a dead person (not at a funeral or wake)	21	31
<b>Personal Victimization</b>		
Threatened with serious physical harm	9	20
Asked to get involved in selling or distributing drugs	3	15
Get hit, slapped, or punched	4	15
Chased by gangs	8	12
Shot with a gun	0	9
Attacked or stabbed with a weapon	2	5
At home when someone has broken into home	5	4
Beaten up or mugged	2	4

## FIGURES



*Figure 1.* Hypothesized direct and mediated relations between poverty-related risks, parents' psychological well-being, and parenting behaviors.

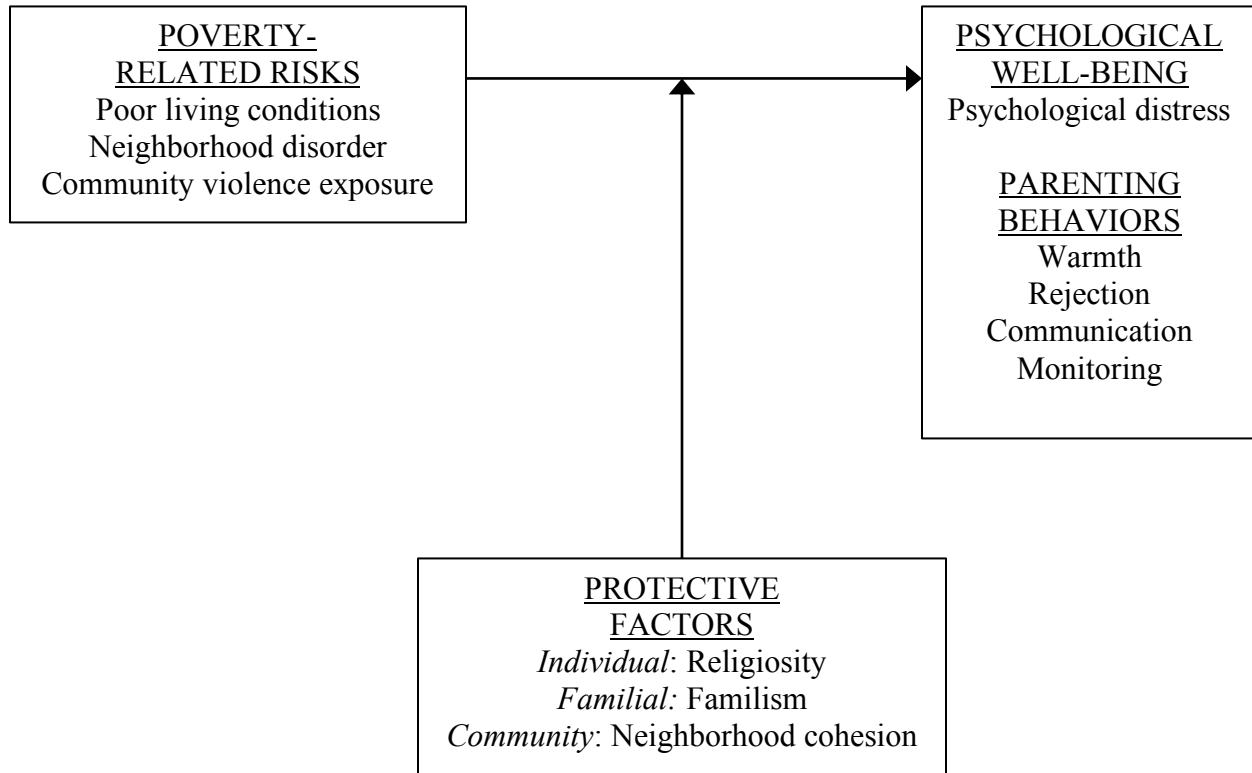
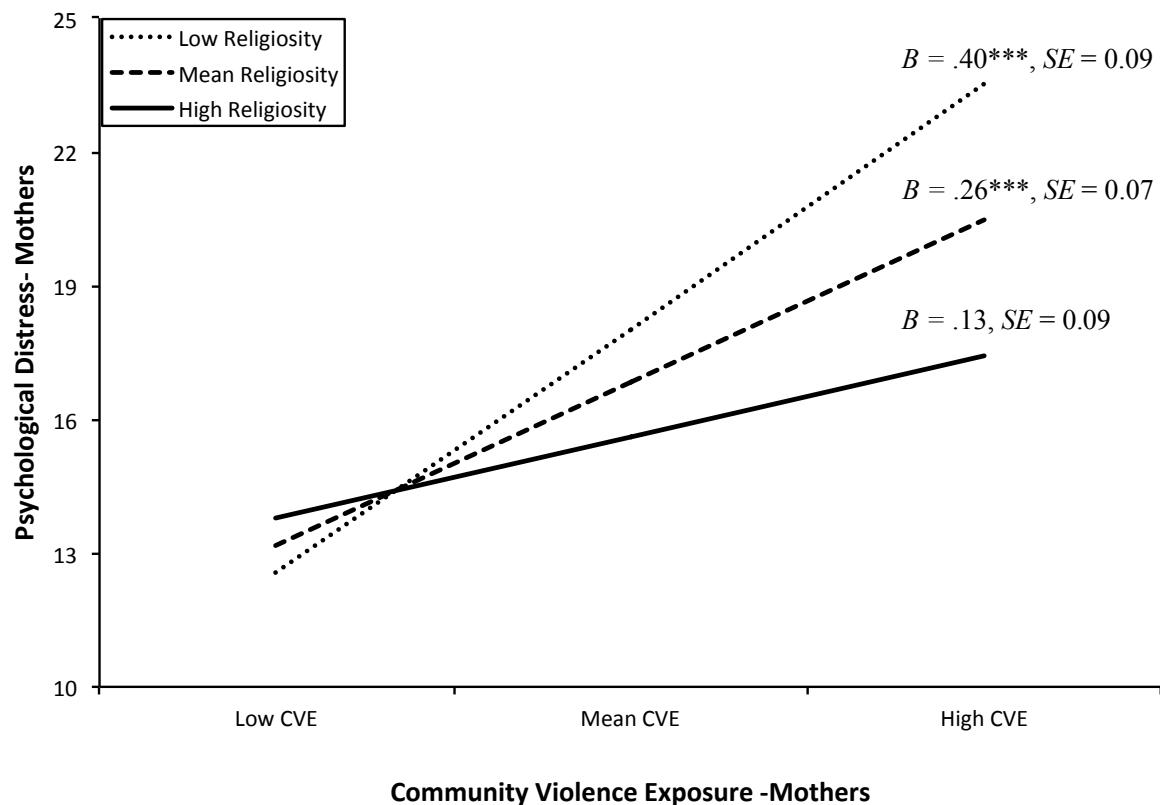
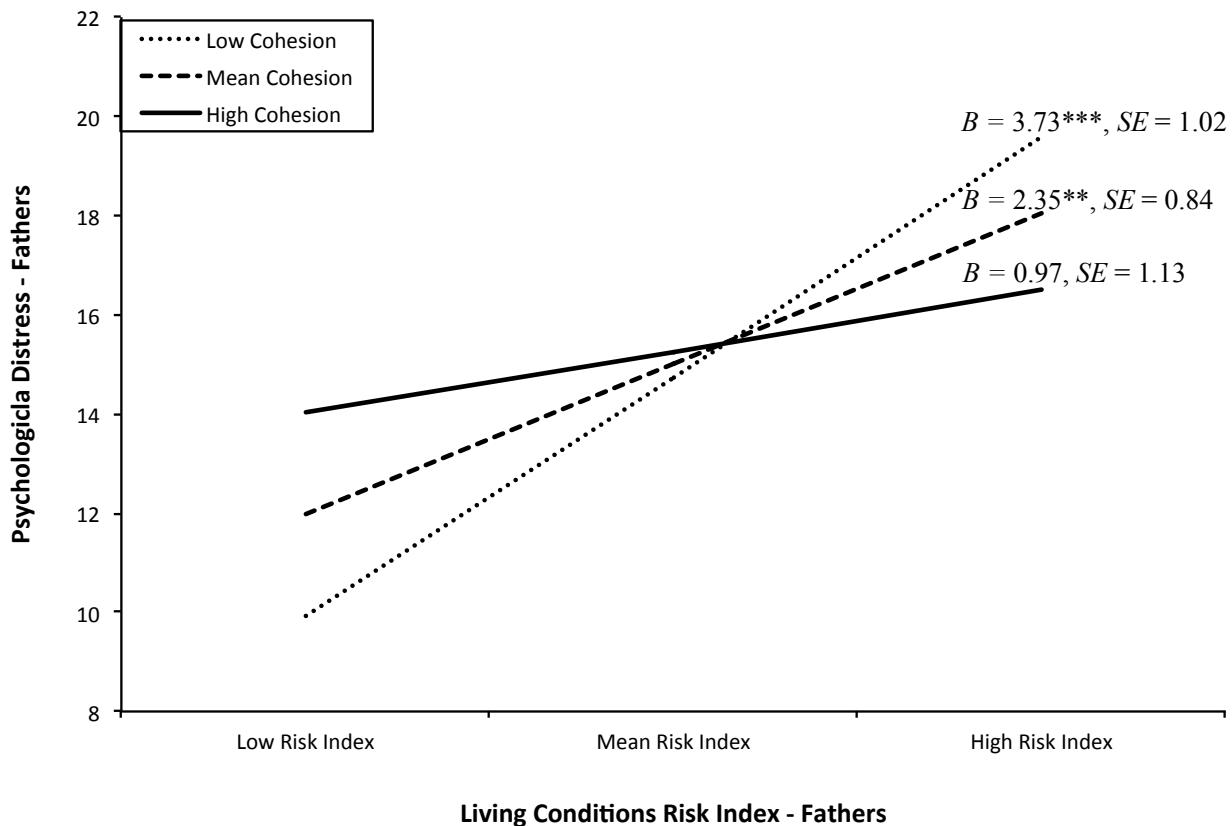


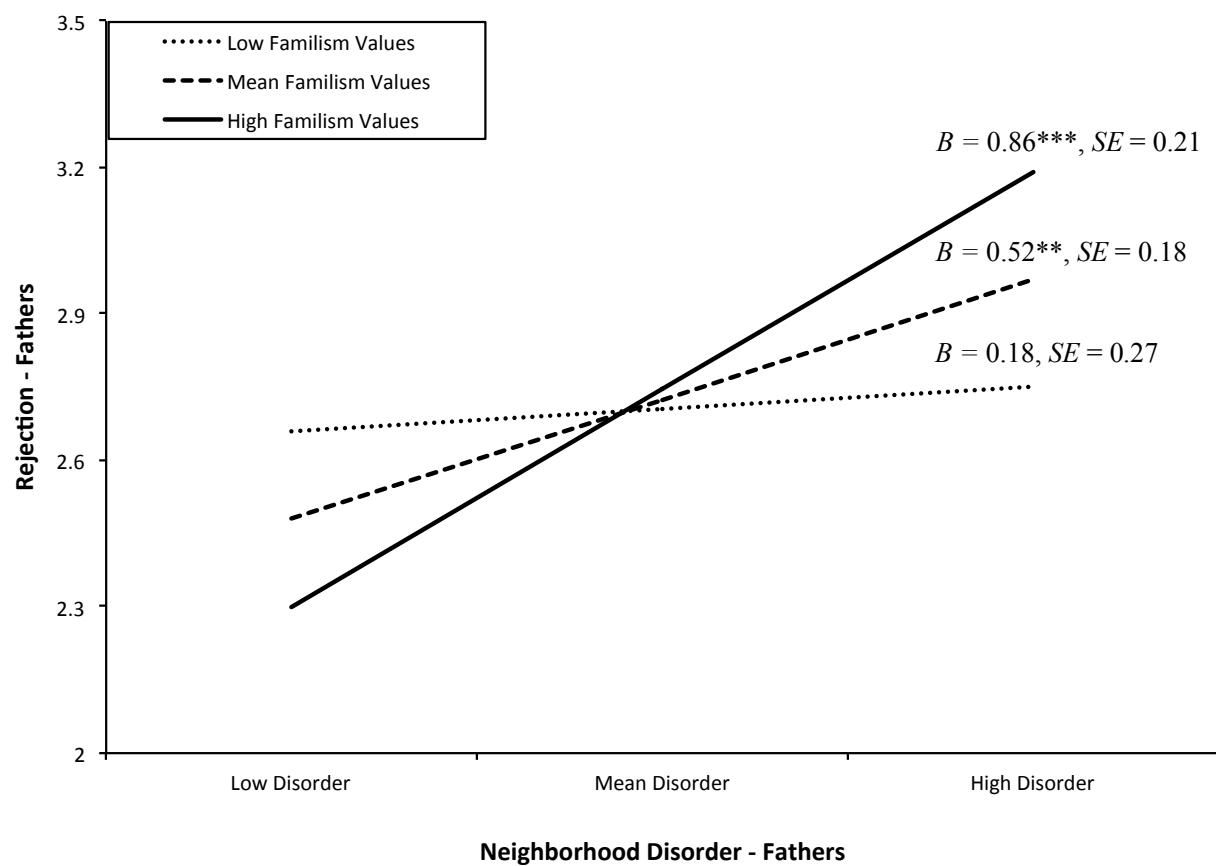
Figure 2. Hypothesized moderated relations between poverty-related risks, parents' psychological well-being, and parenting behaviors.



*Figure 3.* Interaction plot of the moderating effect of religiosity on the relation between community violence exposure and psychological distress for mothers. *Note.* CVE = community violence exposure.  $B$  = unstandardized coefficient,  $SE$  = standard error.  $^{***}p < .001$ .



*Figure 4.* Interaction plot of the moderating effect of neighborhood cohesion on the relation between living conditions and psychological distress for fathers.  $B$  = unstandardized coefficient,  $SE$  = standard error.  $^{**}p < .01$ ,  $^{***}p < .001$ .



*Figure 5.* Interaction plot of the moderating effect of familism values on the relation between neighborhood disorder and rejection for fathers.  $B$  = unstandardized coefficient,  $SE$  = standard error. \*\* $p < .01$ , \*\*\* $p < .001$ .

## REFERENCES

- Ahern, J., & Galea, S. (2011). Collective efficacy and major depression in urban neighborhoods. *American Journal of Epidemiology*, 173(12), 1453–62. doi:10.1093/aje/kwr030
- Aisenberg, E. (2001). The effects of exposure to community violence upon Latina mothers and preschool children. *Hispanic Journal of Behavioral Sciences*, 23(4), 378–398. doi:10.1177/0739986301234003
- Alampay, L. P. (2014). Parenting in the Philippines. In H. Selin (Ed.), *Parenting across cultures: Childrearing, motherhood and fatherhood in non-Western cultures* (Vol. 7, pp. 459–474). Dordrecht, the Netherlands: Springer. doi:10.1007/978-94-007-7503-9
- Alampay, L. P., & Jocson, M. R. M. (2011). Attributions and attitudes of mothers and fathers in the Philippines. *Parenting: Science and Practice*, 11(2–3), 163–176. doi:10.1080/15295192.2011.585564
- Albert, J. R. G., & Raymundo, M. J. M. (2015). Why inequality matters in poverty reduction and why the middle class needs policy attention. *Philippine Institute for Development Studies Discussion Paper Series*, 55, 1–42.
- Alkire, S., & Santos, M. E. (2014). Measuring acute poverty in the developing world: Robustness and scope of the Multidimensional Poverty Index. *World Development*, 59, 251–274. doi:10.1016/j.worlddev.2014.01.026
- Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *The American Psychologist*, 63(7), 602–614. doi:10.1037/0003-066X.63.7.602
- Baer, J. C., Kim, M., & Wilkenfeld, B. (2012). Is it generalized anxiety disorder or poverty? An

- examination of poor mothers and their children. *Child and Adolescent Social Work Journal*, 29(4), 345–355. doi:10.1007/s10560-012-0263-3
- Balisacan, A. M. (2011). *What has really happened to poverty in the Philippines? New measures, evidence, and policy implications* (No. 14). Retrieved from <https://www.econstor.eu/bitstream/10419/93555/1/682320862.pdf>
- Barajas-Gonzalez, R. G., & Brooks-Gunn, J. (2014). Income, neighborhood stressors, and harsh parenting: Test of moderation by ethnicity, age, and gender. *Journal of Family Psychology*, 28(6), 855–866. doi:10.1037/a0038242
- Belle, D., & Doucet, J. (2003). Poverty, inequality, and discrimination as sources of depression among U.S. women. *Psychology of Women Quarterly*, 27(2), 101–13. doi:10.1111/1471-6402.00090
- Bello, A. M., Robles, J. N., Sarmiento, A. F., Tuliao, A. P., & Reyes, R. C. (2011). Motivation, cognitive, and affective factors that predict smoking relapse: A cross-sectional study in a Filipino sample. *The Journal of Smoking Cessation*, 6(1), 17–24. doi:10.1375/jsc.6.1.17
- Bernardo, A. B. I. (2010). Exploring Filipino adolescents' perceptions of the legitimacy of parental authority over academic behaviors. *Journal of Applied Developmental Psychology*, 31(4), 273–280. doi:10.1016/j.appdev.2010.03.003
- Beyers, J. M., Bates, J. E., Pettit, G. S., & Dodge, K. A. (2003). Neighborhood structure, parenting processes, and the development of youths' externalizing behaviors: a multilevel analysis. *American Journal of Community Psychology*, 31(1–2), 35–53. doi:10.1023/A:1023018502759

- Bornstein, M. H., Britto, P. R., Nonoyama-Tarumi, Y., Ota, Y., Petrovic, O., & Putnick, D. L. (2012). Child development in developing countries: Introduction and methods. *Child Development*, 83(1), 16–31. doi:10.1111/j.1467-8624.2011.01671.x
- Bornstein, M. H., Hahn, C.-S., Suwalsky, J. T. D., & Haynes, O. M. (2003). Socioeconomic status, parenting, and child development: The Hollingshead four-factor index of social status and the socioeconomic index of occupations. In M. H. Bornstein & R. H. Bradley (Eds.), *Socioeconomic status, parenting, and child development* (pp. 29–83). Mahwah, NJ: Erlbaum.
- Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress*, 18(6), 685–696. doi:10.1002/jts.20077
- Brennan, R. T., Molnar, B. E., & Earls, F. (2007). Refining the measurement of exposure to violence (ETV) in urban youth. *Journal of Community Psychology*, 35(5), 603–618. doi:10.1002/jcop.20167
- Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., ... Bhutta, Z. A. (2017). Nurturing care: promoting early childhood development. *The Lancet*, 389(10064), 91–102. doi:10.1016/S0140-6736(16)31390-3
- Burlew, A. K., Johnson, C. S., Flowers, A. M., Peteet, B. J., Griffith-Henry, K. D., & Buchanan, N. D. (2009). Neighborhood risk, parental supervision and the onset of substance use among African American adolescents. *Journal of Child and Family Studies*, 18, 680–689. doi:10.1007/s10826-009-9273-y
- Byrnes, H. F., & Miller, B. A. (2012). The relationship between neighborhood characteristics

- and effective parenting behaviors: The role of social support. *Journal of Family Issues*, 33(12), 1658–1687. doi:10.1177/0192513X12437693
- Cabrera, N. J. (2013). Positive development of minority children. *SRCD Social Policy Report*, 27(2), 1–30.
- Calzada, E. J., Tamis-LeMonda, C. S., & Yoshikawa, H. (2013). Familismo in Mexican and Dominican families from low-income, urban communities. *Journal of Family Issues*, 34(12), 1696–1724. doi:10.1177/0192513X12460218
- Carandang, M. L. A. (1987). *Filipino children under stress: Family dynamics and therapy*. Quezon City, Philippines: Ateneo de Manila University Press.
- Cauce, A. M., Stewart, A., Rodriguez, M. D., Cochran, B., & Ginzler, J. (2003). Overcoming the odds? Adolescent development in the context of poverty. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 343–363). New York: Cambridge University Press.
- Caughy, M. O., Nettles, S. M., & O’Campo, P. J. (2007). Community influences on adjustment in first grade: An examination of an integrated process model. *Journal of Child and Family Studies*, 16(6), 819–836. doi:10.1007/s10826-006-9128-8
- Caughy, M. O., O’Campo, P. J., & Muntaner, C. (2003). When being alone might be better: neighborhood poverty, social capital, and child mental health. *Social Science & Medicine*, 57(2), 227–237. doi:10.1016/S0277-9536(02)00342-8
- Ceballo, R., & Hurd, N. (2008). Neighborhood context, SES, and parenting: Including a focus on acculturation among Latina mothers. *Applied Developmental Science*, 12(4), 176–180. doi:10.1080/10888690802387997
- Ceballo, R., Kennedy, T. M., Bregman, A., & Epstein-Ngo, Q. (2012). Always aware (Siempre

- pendiente): Latina mothers' parenting in high-risk neighborhoods. *Journal of Family Psychology*, 26(5), 805–815. doi:10.1037/a0029584
- Ceballo, R., & McLoyd, V. C. (2002). Social support and parenting in poor, dangerous neighborhoods. *Child Development*, 73(4), 1310–1321. doi:10.1111/1467-8624.00473
- Ceballo, R., Ramirez, C., Hearn, K. D., & Maltese, K. L. (2003). Community violence and children's psychological well-being: Does parental monitoring matter? *Journal of Clinical Child and Adolescent Psychology*, 32(4), 586–592. doi:10.1207/S15374424JCCP3204
- Chao, R. K., & Tseng, V. (2002). Parenting of Asians. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 4). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Choi, Y., Kim, T. Y., Noh, S., Lee, J., & Takeuchi, D. (2017). Culture and family process: Measures of familism for Filipino and Korean American parents. *Family Process*, x(x), 1–20. doi:10.1111/famp.12322
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. *Statistical Power Analysis for the Behavioral Sciences*. doi:10.1234/12345678
- Cohen, J. (1992). A power primer. *Quantitative Methods in Psychology*, 112(1), 155–159. doi:10.1038/141613a0
- Colder, C. R., Mott, J., Levy, S., & Flay, B. (2000). The relation of perceived neighborhood danger to childhood aggression: a test of mediating mechanisms. *American Journal of Community Psychology*, 28(1), 83–103. doi:10.1023/A:1005194413796
- Collins, L. M., & Graham, J. W. (2002). The effect of the timing and spacing of observations in longitudinal studies of tobacco and other drug use: temporal design considerations. *Drug and Alcohol Dependence*, 68, S85–S96. doi:10.1016/S0376-8716(02)00217-X
- Conduct Problems Prevention Research Group. (1999). Initial impact of the Fast Track

- prevention trial for conduct problems: I. The high-risk sample. *Journal of Consulting and Clinical Psychology*, 67(5), 631–647. doi:10.1037/0022-006X.67.5.631
- Conger, R. D., & Conger, K. J. (2002). Resilience in Midwestern families: Selected findings from the first decade of a prospective, longitudinal study. *Journal of Marriage and Family*, 64(2), 361–373. doi:10.1111/j.1741-3737.2002.00361.x
- Conger, R. D., Conger, K. J., & Martin, M. J. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and Family*, 72(3), 685–704. doi:10.1111/j.1741-3737.2010.00725.x
- Conger, R. D., Ge, X., Elder, G., Lorenz, F. O., & Simons, R. L. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development*, 65(2), 541–561. doi:10.2307/1131401
- Cooley-Strickland, M., Quille, T. J., Griffin, R. S., Stuart, E. A., Bradshaw, C. P., & Furr-Holden, D. (2009). Community violence and youth: Affect, behavior, substance use, and academics. *Clinical Child and Family Psychology Review*, 12(2), 127–156. doi:10.1007/s10567-009-0051-6
- Culbertson, F. (1997). Depression and gender: An international review. *The American Psychologist*, 52(1), 25–31. doi:10.1037/0003-066X.52.1.25
- Cutrona, C. E., Wallace, G., & Wesner, K. A. (2006). Neighborhood characteristics and depression: An examination of stress processes. *Current Directions in Psychological Science*, 15(4), 188–192. doi:10.1111/j.1467-8721.2006.00433.x
- Daganzo, M. A. A., Alampay, L. P., & Lansford, J. E. (2014). Filipino mothers' self-efficacy in managing anger and parenting, and parental rejection as predictors of child delinquency. *Philippine Journal of Psychology*, 47(2), 1–26.

Davalos, D. B., Chavez, E. L., & Guardiola, R. J. (2005). Effects of perceived parental school support and family communication on delinquent behaviors in Latinos and white non-Latinos. *Cultural Diversity and Ethnic Minority Psychology*, 11(1), 57–68.  
doi:10.1037/1099-9809.11.1.57

De la Cruz, M. T., Protacio, E., Balanon, F., Yacat, J., & Francisco, C. (2001). *Trust and power: Child abuse in the eyes of the child and the parent*. Manila: Save the Children UK and the United Nations Children's Fund.

Decenteceo, E. T. (1999). The Pagdadala model in counseling and therapy. *Philippine Journal of Psychology*, 32(2), 89–104.

Department of Budget and Management. (2016). *Bottom-up Budgeting project extended to barangays* (Vol. 2016). Retrieved from <http://www.gov.ph/2016/01/07/bub-project-extended-to-barangays/>

Duncan, G. J., & Magnuson, K. (2003). Off with Hollingshead: Socioeconomic resources, parenting, and child development. In M. H. Bornstein & R. H. Bradley (Eds.), *Socioeconomic status, parenting, and child development* (pp. 83–106). Mahwah, NJ: Erlbaum.

Emmen, R. A. G., Malda, M., Mesman, J., van IJzendoorn, M. H., Prevoo, M. J. L., & Yeniad, N. (2013). Socioeconomic status and parenting in ethnic minority families: Testing a minority family stress model. *Journal of Family Psychology*, 27(6), 896–904. doi:10.1037/a0034693

Ennis, N. E., Hobfoll, S. E., & Schro, K. E. E. (2000). Money doesn't talk, it swears: How economic stress and resistance resources impact inner-city women's depressive mood. *American Journal of Community Psychology*, 28(2), 149–173.  
doi:10.1023/A:1005183100610

- Enrile, A., & Agbayani, P. T. (2007). Differences in attitudes towards women among three groups of Filipinos: Filipinos in the Philippines, Filipino American immigrants, and US born Filipino Americans. *Journal of Ethnic & Cultural Diversity in Social Work*, 16(1–2), 1–25. doi:10.1300/J051v16n01
- Enriquez, V. (1994). *From colonial to liberation psychology: The Philippine experience*. Manila: De La Salle University Press.
- Evans, G. W. (2004). The environment of childhood poverty. *American Psychologist*, 59(2), 77–92. doi:10.1037/0003-066X.59.2.77
- Evans, G. W., & Kim, P. (2007). Childhood poverty and health: Cumulative risk exposure and stress dysregulation. *Psychological Science*, 18(11), 953–957. doi:10.1111/j.1467-9280.2007.02008.x
- Evans, G. W., Kim, P., Ting, A. H., Tesher, H. B., & Shannis, D. (2007). Cumulative risk, maternal responsiveness, and allostatic load among young adolescents. *Developmental Psychology*, 43(2), 341–351. doi:10.1037/0012-1649.43.2.341
- Evans, G. W., Wells, N. M., & Moch, A. (2003). Housing and mental health: a review of the evidence and a methodological and conceptual critique. *Journal of Social Issues*, 59(3), 475–500. doi:10.1111/1540-4560.00074
- Fauth, R. C., Leventhal, T., & Brooks-Gunn, J. (2007). Welcome to the neighborhood? Long-term impacts of moving to low-poverty neighborhoods on poor children's and adolescents' outcomes. *Journal of Research on Adolescence*, 17(2), 249–284. doi:10.1111/j.1532-7795.2007.00522.x
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26(1), 399–419.

doi:10.1146/annurev.publhealth.26.021304.144357

Ferraro, K. F. (1996). Women's fear of victimization: Shadow of sexual assault? *Social Forces*, 75(2), 667–690. doi:10.2307/2580418

Finlay, L. (2002). "Outing" the researcher: the provenance, process, and practice of reflexivity. *Qualitative Health Research*, 12(4), 531–545. doi:10.1177/104973202129120052

Foster, H., & Brooks-Gunn, J. (2009). Toward a stress process model of children's exposure to physical family and community violence. *Clinical Child and Family Psychology Review*, 12(2), 71–94. doi:10.1007/s10567-009-0049-0

Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltes, B. B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology*, 21(1), 227–259. doi:10.1017/S0954579409000145

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, 18(3), 233–239. doi:10.1111/j.1467-9280.2007.01882.x

Fuligni, A. J., & Masten, C. L. (2010). Daily family interactions among young adults in the United States from Latin American, Filipino, East Asian, and European backgrounds. *International Journal of Behavioral Development*, 34, 491–499. doi:10.1177/0165025409360303

Fuligni, A. J., & Pedersen, S. (2002). Family obligation and the transition to young adulthood. *Developmental Psychology*, 38(5), 856–868. doi:10.1037/0012-1649.38.5.856

Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development*, 70(4), 1030–1044. doi:10.1111/1467-8624.00075

- Fulkerson, J. A., Pasch, K. E., Stigler, M. H., Farbakhsh, K., Perry, C. L., & Komro, K. A. (2010). Longitudinal associations between family dinner and adolescent perceptions of parent-child communication among racially diverse urban youth. *Journal of Family Psychology*, 24(3), 261–70. doi:10.1037/a0019311
- Furstenberg, F. (1993). How families manage risk and opportunity in dangerous neighborhoods. In W. J. Wilson (Ed.), *Sociology and the public agenda* (pp. 231–258). Newbury Park, CA: Sage.
- Gaines, S. O., Marellich, W. D., Bledsoe, K. L., Steers, W. N., Henderson, M. C., Granrose, C. S., ... Page, M. S. (1997). Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and moderated by gender. *Journal of Personality and Social Psychology*, 72(6), 1460–1476. doi:10.1037/0022-3514.72.6.1460
- Gapen, M., Cross, D., Ortigo, K., Graham, A., Johnson, E., Evces, M., ... Bradley, B. (2011). Perceived neighborhood disorder, community cohesion, and PTSD symptoms among low-income African Americans in an urban health setting. *American Journal of Orthopsychiatry*, 81(1), 31–37. doi:10.1111/j.1939-0025.2010.01069.x
- Garcia, A. S., & Alampay, L. P. (2012). Parental efficacy, experience of stressful life events, and child externalizing behavior as predictors of Filipino mothers' and fathers' parental hostility and aggression. *Philippine Journal of Psychology*, 45(1), 1–24.
- Gershoff, E. T., Holden, G. W., Miller, P. C., & Holden, G. W. (1999). Parenting influences from the pulpit: Religious affiliation as a determinant of parental corporal punishment. *Journal of Family Psychology*, 13(3), 307–320. doi:10.1037/0893-3200.13.3.307
- Gibson, C. L., Morris, S. Z., & Beaver, K. M. (2009). Secondary exposure to violence during childhood and adolescence: Does neighborhood context matter? *Justice Quarterly*, 26(1),

30–57. doi:10.1080/07418820802119968

Gill, C. S., Barrio Minton, C. A., & Myers, J. E. (2010). Spirituality and religiosity: Factors affecting wellness among low-income, rural women. *Journal of Counseling &*

*Development*, 88, 293–302. doi:10.1002/j.1556-6678.2010.tb00025.x

Goh, R. B. H. (2004). Asian Christian networks: Transnational structures and geopolitical mappings. *Journal of Religion and Society*, 6, 1–13.

Gonzales, N. A., Coxe, S., Roosa, M. W., White, R. M. B., Knight, G. P., Zeiders, K. H., & Saenz, D. (2011). Economic hardship, neighborhood context, and parenting: prospective effects on Mexican-American adolescent's mental health. *American Journal of Community Psychology*, 47(1–2), 98–113. doi:10.1007/s10464-010-9366-1

Gordon, D., Nandy, S., Pantazis, C., Pemberton, S., & Townsend, P. (2003). *Child poverty in the developing world*. Bristol: The Policy Press.

Gorman-Smith, D., Henry, D. B., & Tolan, P. H. (2004). Exposure to community violence and violence perpetration: The protective effects of family functioning. *Journal of Clinical Child and Adolescent Psychology*, 33(3), 439–449. doi:10.1207/s15374424jccp3303

Guerra, N. G., Rowell Huesmann, L., & Spindler, A. (2003). Community violence exposure, social cognition, and aggression among urban elementary school children. *Child Development*, 74(5), 1561–1576. doi:10.1111/1467-8624.00623

Gutman, L. M., & McLoyd, V. C. (2000). Parents' management of their children's education within the home, at school, and in the community: An examination of African-American families living in poverty. *The Urban Review*, 32(1), 1–24. doi:10.1023/A:1005112300726

Gutman, L. M., McLoyd, V. C., & Tokoyawa, T. (2005). Financial strain, neighborhood stress, parenting behaviors, and adolescent adjustment in urban African American families.

*Journal of Research on Adolescence*, 15(4), 425–449. doi:10.1111/j.1532-7795.2005.00106.x

Halgunseth, L. C., Ispa, J. M., & Rudy, D. (2006). Parental control in Latino families: An integrated review of the literature. *Child Development*, 77(5), 1282–1297. doi:10.1111/j.1467-8624.2006.00934.x

Harper, S. E. (2010). Exploring the role of Filipino fathers: Paternal behaviors and child outcomes. *Journal of Family Issues*, 31(1), 66–89. doi:10.1177/0192513X09342858

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420. doi:10.1080/03637750903310360

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.

Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: does method really matter? *Psychological Science*, 24(10), 1918–1927. doi:10.1177/0956797613480187

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *The Behavioral and Brain Sciences*, 33(2–3), 61–83–135. doi:10.1017/S0140525X0999152X

Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44(2), 227–239. doi:10.1348/014466505X29657

Hill, N. E., & Herman-Stahl, M. A. (2002). Neighborhood safety and social involvement: Associations with parenting behaviors and depressive symptoms among African American and Euro-American mothers. *Journal of Family Psychology*, 16(2), 209–219.

doi:10.1037/0893-3200.16.2.209

Hill, P. C., & Pargament, K. I. (2008). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *Psychology of Religion and Spirituality, 5*(1), 3–17. doi:10.1037/1941-1022.S.1.3

Hill, T. D., Ross, C. E., & Angel, R. J. (2005). Neighborhood disorder, psychophysiological distress, and health. *Journal of Health and Social Behavior, 46*(2), 170–186. doi:10.1177/002214650504600204

Hindin, M. J. (2005). Family dynamics, gender differences and educational attainment in Filipino adolescents. *Journal of Adolescence, 28*(3), 299–316. doi:10.1016/j.adolescence.2004.12.003

Hoff, E., Laursen, B., & Tardif, T. (2002). *Socioeconomic status and parenting*. (M. H. Bornstein, Ed.)*The handbook of parenting (Volume 2): Biology and ecology of parenting* (Vol. 58). Mahwah, NJ: Lawrence Erlbaum Associates. doi:10.2307/353999

Huebner, A. J., & Howell, L. W. (2003). Examining the relationship between adolescent sexual Risk-Taking and perceptions of monitoring, communication, and parenting styles. *Journal of Adolescent Health, 33*(2), 71–78. doi:10.1016/S1054-139X(03)00141-1

Huston, A. C., Duncan, G. J., Granger, R., Bos, J., McLoyd, V., Mistry, R., ... Ventura, A. (2001). Work-based antipoverty program for parents can enhance the school performance and social behavior of children. *Child Development, 72*(1), 318–336. doi:10.1111/1467-8624.00281

Iruka, I. U., LaForett, D. R., & Odom, E. C. (2012). Examining the validity of the family investment and stress models and relationship to children's school readiness across five cultural groups. *Journal of Family Psychology, 26*(3), 359–370. doi:10.1037/a0028290

- Jaccard, J., & Wan, C. K. (1996). *LISREL approaches to interaction effects in multiple regression*. Newbury Park, CA: Sage.
- Jaffee, S. R., Caspi, A., Moffitt, T. E., Polo-Tomás, M., & Taylor, A. (2007). Individual, family, and neighborhood factors distinguish resilient from non-resilient maltreated children: A cumulative stressors model. *Child Abuse and Neglect*, 31(3), 231–253.  
doi:10.1016/j.chab.2006.03.011
- Jocson, R. M., Alampay, L. P., & Lansford, J. E. (2012). Predicting Filipino mothers' and fathers' reported use of corporal punishment from education, authoritarian attitudes, and endorsement of corporal punishment. *International Journal of Behavioral Development*, 36(2), 137–145. doi:10.1177/0165025411428249
- Jocson, R. M., & Garcia, A. S. (2017). Low-income urban Filipino mothers' experiences with community violence. *International Perspectives in Psychology: Research, Practice, Consultation*, 6(33), 133–151. doi:10.1037/ipp0000071
- Jocson, R. M., & McLoyd, V. C. (2015). Neighborhood and housing disorder, parenting, and youth adjustment in low-income urban families. *American Journal of Community Psychology*, 55(3–4), 304–313. doi:10.1007/s10464-015-9710-6
- Juan-Albacea, Z. V. (2009). *Small area estimation of poverty statistics*. Philippine Institute for Development Studies Discussion Paper Series. Retrieved from <http://publication.pids.gov.ph/pubdetails.phtml?code=DP 2009-16>
- Kennedy, T. M., & Ceballo, R. (2013). Latino adolescents' community violence exposure: After-school activities and familismo as risk and protective factors. *Social Development*, 22(4), 663–682. doi:10.1111/sode.12030
- Kennedy, T. M., & Ceballo, R. (2014). Who, what, when, and where? Toward a dimensional

- conceptualization of community violence exposure. *Review of General Psychology*, 18(2), 69–81. doi:10.1037/gpr0000005
- Kennedy, T. M., & Ceballo, R. (2016). Emotionally numb: Desensitization to community violence exposure among urban youth. *Developmental Psychology*, 52(5), 778–789. doi:10.1037/dev0000112
- Kessler, R. C. (2003). Epidemiology of women and depression. *Journal of Affective Disorders*, 74(1), 5–13. doi:10.1016/S0165-0327(02)00426-3
- Kim-Cohen, J., & Gold, A. L. (2009). Measured gene–environment interactions and mechanisms promoting resilient development. *Current Directions in Psychological Science*, 18(3), 138–142. doi:10.1111/j.1467-8721.2009.01624.x
- King, R. B., & Ganotice, F. A. (2015). Does family obligation matter for students' motivation, engagement, and well-being?: It depends on your self-construal. *Personality and Individual Differences*, 86, 243–248. doi:10.1016/j.paid.2015.06.027
- Koenig, H. G. (2009). Research on religion, spirituality, and mental health: A review. *Canadian Journal of Psychiatry*, 54(5), 283–291. doi:10.1177/070674370905400502
- Kohen, D. E., Dahinten, V. S., & McIntosh, C. N. (2008). Neighborhood disadvantage: Pathways of effects for young children. *Child Development*, 79(1), 156–169. doi:10.1111/j.1467-8624.2007.01117.x
- Kotchick, B. A., Dorsey, S., & Heller, L. (2005). Predictors of parenting among African American single mothers: Personal and contextual factors. *Journal of Marriage and Family*, 67(May), 448–460. doi:10.1111/j.0022-2445.2005.00127.x
- Kroneman, L., Loeber, R., & Hipwell, A. E. (2004). Is neighborhood context differently related to externalizing problems and delinquency for girls compared with boys? *Clinical Child and*

- Family Psychology Review*, 7(2), 109–22. doi:10.1023/B:CCFP.0000030288.01347.a2
- Lacar, L. Q. (1995). Familism among Muslims and Christians in the Philippines. *Philippine Studies*, 43(1), 42–65. Retrieved from <http://www.philippinestudies.net/files/journals/1/articles/2916/public/2916-3191-1-PB.pdf>
- Lamis, D. A., Wilson, C. K., Tarantino, N., Lansford, J. E., & Kaslow, N. J. (2014). Neighborhood disorder, spiritual well-being, and parenting stress in African American women. *Journal of Family Psychology*, 28(6), 769–778. doi:10.1037/a0036373
- Landers-Potts, M. A., Wickrama, K. A. S., Simons, L. G., Cutrona, C., Gibbons, F. X., Simons, R. L., & Conger, R. D. (2015). An extension and moderational analysis of the family stress model focusing on African American adolescents. *Family Relations*, 64(2), 233–248. doi:10.1111/fare.12117
- Laursen, B., & Collins, W. A. (2004). Parent-child communication during adolescence. In A. L. Valgelisti (Ed.), *Handbook of family communication* (pp. 333–348). Mahwah, NJ: Erlbaum. Retrieved from <http://books.google.com/books?hl=en&lr=&id=ONN01B5RJe0C&pgis=1>
- Lennon, M. C., Blome, J., & English, K. (2002). Depression among women on welfare: A review of the literature. *Journal of the American Medical Women's Association*, 57(1), 27–31.
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126(2), 309–337. doi:10.1037//0033-2909.126.2.309
- Levin, J. S., Taylor, R. J., & Chatters, L. M. (1995). A multidimensional measure of religious involvement for African Americans. *The Sociological Quarterly*, 36(1), 157–173. doi:10.1111/j.1533-8525.1995.tb02325.x

- Liwag, M. E. C. D., de la Cruz, A., & Macapagal, E. (1998). How we raise our daughters and sons: Child-rearing and gender socialization in the Philippines. *Philippine Journal of Psychology*, 31(1998), 1–46.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343. doi:10.1016/0005-7967(94)00075-U
- Lund, C., Breen, A., Flisher, A. J., Kakuma, R., Corrigall, J., Joska, J. A., ... Patel, V. (2010). Poverty and common mental disorders in low and middle income countries: A systematic review. *Social Science & Medicine*, 71(3), 517–528. doi:10.1016/j.socscimed.2010.04.027
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: a critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–562. doi:10.1111/1467-8624.00164
- Mackinnon, D. P. (2008). *Introduction to statistical mediation analysis*. New York: Routledge.
- Margolin, G., Vickerman, K. A., Oliver, P. H., & Gordis, E. B. (2010). Violence exposure in multiple interpersonal domains: Cumulative and differential effects. *Journal of Adolescent Health*, 47(2), 198–205. doi:10.1016/j.jadohealth.2010.01.020
- Mattis, J. S. (2002). Religion and spirituality in the meaning-making and coping experiences of African American women: A qualitative analysis. *Psychology of Women Quarterly*, 26, 309–321. doi:10.1111/1471-6402.t01-2-00070
- Mattis, J. S., Fontenot, D. L., & Hatcher-Kay, C. A. (2003). Religiosity, racism, and dispositional optimism among African Americans. *Personality and Individual Differences*, 34, 1025–1038. doi:10.1016/S0191-8869(02)00087-9

May, D. C., Rader, N. E., & Goodrum, S. (2010). A gendered assessment of the threat of victimization": Examining gender differences in fear of crime, perceived risk, avoidance, and defensive behaviors. *Criminal Justice Review*, 35(2), 159–182.

doi:10.1177/0734016809349166

McCann-Erickson Philippines. (2006). *2006 McCann Inter-generation Study: Youth study highlights*. Manila.

McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, 61(2), 311–346. doi:10.2307/1131096

McLoyd, V. C., Kaplan, R., Purtell, K. M., Bagley, E., Hardaway, C. R., & Smalls, C. (2009). Poverty and socioeconomic disadvantage in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 444–491). New York: Wiley.

McLoyd, V. C., Mistry, R. S., & Hardaway, C. R. (2013). Poverty and children's development: Familial processes as mediating influences. In E. T. Gershoff, R. S. Mistry, & D. Crosby (Eds.), *Societal contexts of child development: Pathways of influence and implications for practice and policy* (pp. 109–124). New York: Oxford University Press.

Meadows, L. A., Kaslow, N. J., Thompson, M. P., & Jurkovic, G. J. (2005). Protective factors against suicide attempt risk among African American women experiencing intimate partner violence. *American Journal of Community Psychology*, 36(1–2), 109–121.

doi:10.1007/s10464-005-6236-3

Medina, B. T. G. (2001). *The Filipino family* (2nd ed.). Quezon City, Philippines: University of the Philippines Press.

Minujin, A., Delamonica, E., Davidziuk, A., & Gonzalez, E. D. (2006). The definition of child

- poverty: A discussion of concepts and measurements. *Environment and Urbanization*, 18(2), 481–500. doi:10.1177/0956247806069627
- Mitchell, S. J., Lewin, A., Horn, I. B., Valentine, D., Sanders-Phillips, K., & Joseph, J. G. (2010). How does violence exposure affect the psychological health and parenting of young African-American mothers? *Social Science & Medicine*, 70(4), 526–533. doi:10.1016/j.socscimed.2009.10.048
- Mmari, K., & Blum, R. W. (2009). Risk and protective factors that affect adolescent reproductive health in developing countries: a structured literature review. *Global Public Health*, 4(4), 350–366. doi:10.1080/17441690701664418
- Morillo, H. M., Capuno, J. J., & Mendoza, A. M. (2013). Views and values on family among Filipinos: An empirical exploration. *Asian Journal of Social Science*, 41(1), 5–28. doi:10.1163/15685314-12341278
- Murry, V. M., Berkel, C., Gaylord-Harden, N. K., Copeland-Linder, N., & Nation, M. (2011). Neighborhood poverty and adolescent development. *Journal of Research on Adolescence*, 21(1), 114–128. doi:10.1111/j.1532-7795.2010.00718.x
- Muthén, L., & Muthén, B. (2015). *Mplus user's guide (version 7.0)*. Los Angeles, CA: Author.
- Nadal, K. L. (2004). Pilipino American identity development model. *Journal of Multicultural Counseling and Development*, 32, 45–62. doi:10.1002/j.2161-1912.2004.tb00360.x
- National Statistical Coordination Board. (2009). *2003 city and municipal level poverty estimates*. Retrieved from <http://www.nscb.gov.ph/poverty/sae/2003> SAE of poverty (Full Report).pdf
- National Statistics Office. (2010). *2008 Annual Poverty Indicators Survey*. Manila, Philippines. Retrieved from <http://psa.gov.ph/psada/index.php/catalog/55/download/319>
- Newland, R. P., Crnic, K. A., Cox, M. J., & Mills-Koonce, W. R. (2013). The family model

- stress and maternal psychological symptoms: Mediated pathways from economic hardship to parenting. *Journal of Family Psychology*, 27(1), 96–105. doi:10.1037/a0031112
- Ng-Mak, D. S., Salzinger, S., Feldman, R. S., & Stueve, C. A. (2004). Pathological adaptation to community violence among inner-city youth. *American Journal of Orthopsychiatry*, 74(2), 196–208. doi:10.1037/0002-9432.74.2.196
- Norton, P. J. (2007). Depression Anxiety and Stress Scales (DASS-21): Psychometric analysis across four racial groups. *Anxiety, Stress, and Coping*, 20(3), 253–265. doi:10.1080/10615800701309279
- Odgers, C. L., Moffitt, T. E., Tach, L. M., Sampson, A., Taylor, R. J., Matthews, C. L., & Caspi, A. (2009). The protective effects of neighborhood collective efficacy on British children growing up in deprivation: a developmental analysis. *Developmental Psychology*, 45(4), 942–57. doi:10.1037/a0016162
- Oei, T. P. S., Sawang, S., Goh, Y. W., & Mukhtar, F. (2013). Using the Depression Anxiety Stress Scale 21 (DASS-21) across cultures. *International Journal of Psychology*, 48(6), 1018–29. doi:10.1080/00207594.2012.755535
- Paranjape, A., & Kaslow, N. (2010). Family violence exposure and health outcomes among older African American women: Do spirituality and social support play protective roles? *Journal of Women's Health*, 19(10), 1899–1904. doi:10.1089/jwh.2009.1845
- Parke, R. D., Coltrane, S., Duffy, S., Buriel, R., Dennis, J., Powers, J., ... Widaman, K. F. (2004). Economic stress, parenting, and child adjustment in Mexican American and European American families. *Child Development*, 75(6), 1632–1656. doi:10.1111/j.1467-8624.2004.00807.x
- Parreñas, R. S. (2006). *Children of global migration*. Manila: Ateneo de Manila University

Press.

Patel, V. (2007). Mental health in low- and middle-income countries. *British Medical Bulletin*, 81–82(1), 81–96. doi:10.1093/bmb/ldm010

Pe-Pua, R. (2006). From decolonizing psychology to the development of a cross-indigenous perspective in methodology: The Philippine experience. In U. Kim, K.-S. Yang, & K.-K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (pp. 109–137). New York: Springer.

Pe-Pua, R., & Protacio-Marcelino, E. A. (2000). Sikolohiyang Pilipino (Filipino psychology): A legacy of Virgilio G. Enriquez. *Asian Journal of Social Psychology*, 3, 49–71. doi:10.1111/1467-839X.00054

Pew Research Center. (2011). *Christian population in numbers by country*. Washington, DC: Pew Research Center. Retrieved from <http://www.pewforum.org/2011/12/19/table-christian-population-in-numbers-by-country/>

Philippine National Police. (2015). *Top 15 urbanized cities 2010-2015*. Retrieved from <http://data.gov.ph/catalogue/dataset/crime-statistics---top-15-urbanized-cities-2010-2015>

Philippine National Police. (2017). *Philippine National Police crime report July 2016 to June 2017*. Quezon City, Philippines.

Philippine Statistics Authority. (2016a). *Highlights of the Philippine population 2015 Census of Population*. Retrieved from <http://web0.psa.gov.ph/content/highlights-philippine-population-2015-census-population>

Philippine Statistics Authority. (2016b). *Philippines in figures 2016*. Retrieved from <http://web0.psa.gov.ph/sites/default/files/PIF%202016.pdf>

Pinderhughes, E. E., Nix, R., Foster, E. M., Jones, D., & The Conduct Problems Prevention

- Research Group. (2001). Parenting in context: Impact of neighborhood poverty, residential stability, public services, social networks, and danger on parental behaviors. *Journal of Marriage and the Family*, 63(4), 941–953. doi:10.1111/j.1741-3737.2001.00941.x
- Pokhrel, P., Unger, J. B., Wagner, K. D., Ritt-Olson, A., & Sussman, S. (2008). Effects of parental monitoring, parent-child communication, and parents' expectation of the child's acculturation on the substance use behaviors of urban, Hispanic adolescents. *Journal of Ethnicity in Substance Abuse*, 7(March 2015), 200–213. doi:10.1080/15332640802055665
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731. doi:10.3758/BF03206553
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. doi:10.3758/BRM.40.3.879
- Racelis, M., & Aguirre, A. D. M. (2002). Child rights for urban poor children in child friendly Philippine cities: views from the community. *Environment and Urbanization*, 14(2), 97–113. doi:10.1177/095624780201400208
- Racelis, M., Aguirre, A. D. M., Alampay, L. P., Etemadi, F. U., & Fernandez, R. M. (2005). *Making Philippine cities child friendly: Voices of children in poor communities*. Florence, Italy: UNICEF Innocenti Research Centre.
- Rains, C. (2004). *Fast Track project technical report: Parent-child communication, parent-report*. Retrieved from <https://fasttrackproject.org/techrept/p/pcp/pcp12tech.pdf>
- Raymundo, C. M., & Cruz, G. T. (2004). *Youth, sex, and risk behaviors in the Philippines. A report on a nationwide study: 2002 Young Adult Fertility and Sexuality Study (YAFS3)*.

- Quezon City, Philippines: University of the Philippines Population Institute.
- Ross, C. E., & Mirowsky, J. (1999). Disorder and decay: The concept and measurement of perceived neighborhood disorder. *Urban Affairs Review*, 34(3), 412–432.  
doi:10.1177/10780879922184004
- Ross, C. E., & Mirowsky, J. (2009). Neighborhood disorder, subjective alienation, and distress. *Journal of Health and Social Behavior*, 50(1), 49–64. doi:10.1177/002214650905000104
- Ross, C. E., Mirowsky, J., & Pribesh, S. (2001). Powerlessness and the amplification of threat: Neighborhood disadvantage, disorder, and mistrust. *American Sociological Review*, 66(4), 568–591. doi:10.2307/3088923
- Ruiz, M. E., & Ransford, H. E. (2012). Latino elders reframing familismo: implications for health and caregiving support. *Journal of Cultural Diversity*, 19(2), 50–57.
- Ruiz Austria, C. S. (2004). The Church, the state and women's bodies in the context of religious fundamentalism in the Philippines. *Reproductive Health Matters*, 12(24), 96–103.  
doi:10.1016/S0968-8080(04)24152-0
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316–331. doi:10.1111/j.1939-0025.1987.tb03541.x
- Salk, R. H., Hyde, J. S., & Abramson, L. Y. (2017). Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. *Psychological Bulletin*, 143(8), 783–822. doi:10.1037/bul0000102
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918–924.  
doi:10.1126/science.277.5328.918
- Schafer, J. A., Huebner, B. M., & Bynum, T. S. (2006). Fear of crime and criminal victimization:

- Gender-based contrasts. *Journal of Criminal Justice*, 34(3), 285–301.  
doi:10.1016/j.jcrimjus.2006.03.003
- Schwartz, S. J. (2007). The applicability of familism to diverse ethnic groups: A preliminary study. *The Journal of Social Psychology*, 147(2), 101–118. doi:10.3200/SOCP.147.2.101-118
- Schwarz, J. C., Barton-Henry, M. L., & Pruzinsky, T. (1985). Assessing child-rearing behaviors: a comparison of ratings made by mother, father, child, and sibling on the CRPBI. *Child Development*, 56(2), 462–479. doi:10.2307/1129734
- Selner-O'Hagan, M. B., Kindlon, D. J., Buka, S. L., Raudenbush, S. W., & Earls, F. J. (1998). Assessing exposure to violence in urban youth. *Journal of Child Psychology and Psychiatry*, 39(2), 215–224. doi:<http://dx.doi.org/10.1017/S002196309700187X>
- Seybold, K. S., & Hill, P. C. (2001). The role of religion and spirituality in mental and physical health. *Current Directions in Psychological Science*, 10(1), 21–24. doi:10.1111/1467-8721.00106
- Sheridan, M. A., Sarsour, K., Jutte, D., D'Esposito, M., & Boyce, W. T. (2012). The impact of social disparity on prefrontal function in childhood. *PLoS ONE*, 7(4).  
doi:10.1371/journal.pone.0035744
- Siefert, K., Finlayson, T. L., Williams, D. R., Delva, J., & Ismail, A. I. (2007). Modifiable risk and protective factors for depressive symptoms in low-income African American mothers. *American Journal of Orthopsychiatry*, 77(1), 113–123. doi:10.1037/0002-9432.77.1.113
- Skinner, A., Bacchini, D., Lansford, J., Godwin, J., Sorbring, E., Tapanya, S., ... Pastorelli, C. (2014). Neighborhood danger, parental monitoring, harsh parenting, and child aggression in nine countries. *Societies*, 4(1), 45–67. doi:10.3390/soc4010045

- Stein, G. L., Cupito, A. M., Mendez, J. L., Prandoni, J., Huq, N., & Westerberg, D. (2014). Familism through a developmental lens. *Journal of Latina/o Psychology*, 2(4), 224–250. doi:10.1037/lat0000025
- Steinberg, L., Fletcher, A., & Darling, N. (1994). Parental monitoring and peer influences on adolescent substance use. *Pediatrics*, 93(6), 1060–1064.
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology*, 52, 83–110. doi:10.1146/annurev.psych.52.1.83
- Sullins, D. P. (2006). Gender and religion: Deconstructing universality, constructing complexity. *American Journal of Sociology*, 112(3), 838–880. doi:10.1086/507852
- Sullivan, T. N., Kung, E. M., & Farrell, A. D. (2004). Relation between witnessing violence and drug use initiation among rural adolescents: Parental monitoring and family support as protective factors. *Journal of Clinical Child and Adolescent Psychology*, 33(3), 488–498. doi:10.1207/s15374424jccp3303\_6
- Super, C. M., & Harkness, S. (2002). Culture structures the environment for development. *Human Development*, 45, 270–274. doi:10.1159/000064988
- Tan, A. L. (1994). Four meanings of fatherhood. *Philippine Sociological Review*, 42, 27–39.
- Todd, J. L., & Worell, J. (2000). Resilience in low-income, employed, African American women. *Psychology of Women Quarterly*, 24(2), 119–128. doi:10.1111/j.1471-6402.2000.tb00192.x
- Trentacosta, C. J., & Shaw, D. S. (2008). Maternal predictors of rejecting parenting and early adolescent antisocial behavior. *Journal of Abnormal Child Psychology*, 36(2), 247–259. doi:10.1007/s10802-007-9174-8
- Tuason, M. T. (2011). Those who were born poor: A qualitative study of Philippine poverty.

*International Perspectives in Psychology: Research, Practice, Consultation*, 1(S), 38–57.

doi:10.1037/2157-3883.1.S.38

Umaña-Taylor, A. J., Updegraff, K. A., & Gonzales-Backen, M. A. (2011). Mexican-origin adolescent mothers' stressors and psychosocial functioning: Examining ethnic identity affirmation and familism as moderators. *Journal of Youth and Adolescence*, 40(2), 140–157.  
doi:10.1007/s10964-010-9511-z

United Nations Children's Fund. (2010). UNICEF Philippines annual country report. Retrieved from

[http://www.unicef.org/philippines/UNICEF\\_Philippines\\_Annual\\_Report\\_2010\\_web\\_version.pdf](http://www.unicef.org/philippines/UNICEF_Philippines_Annual_Report_2010_web_version.pdf)

Vandewater, E. A., & Lansford, J. E. (2005). A family process model of problem behaviors in adolescents. *Journal of Marriage and Family*, 67(1), 100–109. doi:10.1111/j.0022-2445.2005.00008.x

Villarreal, R., Blozis, S. A., & Widaman, K. F. (2005). Factorial invariance of a pan-Hispanic familism scale. *Hispanic Journal of Behavioral Sciences*, 27(4), 409–425.  
doi:10.1177/0739986305281125

Walker, S. P., Wachs, T. D., Grantham-Mcgregor, S., Black, M. M., Nelson, C. A., Huffman, S. L., ... Richter, L. (2011). Inequality in early childhood: Risk and protective factors for early child development. *The Lancet*, 378(9799), 1325–1338. doi:10.1016/S0140-6736(11)60555-2

Watlington, C. G., & Murphy, C. M. (2006). The roles of religion and spirituality among African American survivors of domestic violence. *Journal of Clinical Psychology*, 62(7), 837–857.  
doi:10.1002/jclp.20268

- White, R. M. B., Liu, Y., Nair, R. L., & Tein, J. (2015). Longitudinal and integrative tests of family stress model effects on Mexican origin adolescents. *Developmental Psychology, 51*(5), 649–662. doi:10.1037/a0038993
- White, R. M. B., & Roosa, M. W. (2012). Neighborhood contexts, fathers, and Mexican American young adolescents' internalizing symptoms. *Journal of Marriage and the Family, 74*(1), 152–166. doi:10.1111/j.1741-3737.2011.00878.x
- White, R. M. B., Roosa, M. W., Weaver, S. R., & Nair, R. L. (2009). Cultural and contextual influences on parenting in Mexican American families. *Journal of Marriage and Family, 71*(1), 61. doi:10.1111/j.1741-3737.2008.00580.x
- World Health Organization. (2000). *Women's mental health: An evidence based review*. Geneva.
- Retrieved from  
[http://www.who.int/mental\\_health/publications/women\\_mh\\_evidence\\_review/en/](http://www.who.int/mental_health/publications/women_mh_evidence_review/en/)
- Wright, M. O., Masten, A. S., & Narayan, A. J. (2013). Resilience processes in development: Four waves of research on positive adaptation in the context of adversity. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 15–37). New York: Springer.  
doi:10.1007/978-1-4614-6375-7
- Zhang, S., & Anderson, S. G. (2010). Low-income single mothers' community violence exposure and aggressive parenting practices. *Children and Youth Services Review, 32*(6), 889–895. doi:10.1016/j.childyouth.2010.02.010
- Zhang, S., & Eamon, M. K. (2011). Parenting practices as mediators of the effect of mothers' community violence exposure on young children's aggressive behavior. *Families in Society, 92*(3), 336–343. doi:10.1606/1044-3894.4130