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Family hardiness, social support, and self-efficacy in mothers of individuals with Autism Spectrum Disorders☆

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ABSTRACT

Family hardiness is an important construct to understand coping in parents of individuals with Autism Spectrum Disorders (ASD), who are often at risk for considerable distress in the face of multiple stressors. The current study examined family hardiness, perceived social support and parent self-efficacy as predictors of family distress in 138 mothers of individuals with ASD, 4–41 years of age. Using a multiple mediation analysis, we demonstrated that perceived self-efficacy and social support mediated the link between the pile-up of stressors and family hardiness, and that hardiness was a partial mediator in explaining how stressors were associated with family distress. Researchers and clinicians should consider the role that perceived social support and parent self-efficacy play in explaining family hardiness, and how the perception of such hardiness is associated with less distress.

Researchers have been conducting studies of psychological well-being in parents of people with Autism Spectrum Disorders (ASD) for decades, and have sought to identify 'stressors' associated with poor outcomes. Reports indicate more negative outcomes in parents of children with ASD compared to parents of typically developing children or those with intellectual disabilities without ASD (Hartley, Seltzer, Head, & Abbeduto, 2012; Montes & Halterman, 2007; Sanders & Morgan, 1997; Sivberg, 2002). Negative outcomes are often related to chronic stressors, such as the severity of child behavior problems (Abbeduto et al., 2004; Hastings, 2003; Lecavalier, Leone, & Wiltz, 2006), of autism symptom severity (Duarte, Bordin, Yazigi, & Mooney, 2005), or a "pile up" of stressors (Bristol, 1987). Researchers often operationalize negative parental outcomes as the experience of stress (Davis & Carter, 2008; Ekas, Lickenbrock, & Whitman, 2010; Lecavalier et al., 2006) or mental health problems (Ekas et al., 2010; Weiss, Cappadocia, MacMullin, Viecili, & Lunsky, 2012).

It is critical that we discern factors that help families remain resilient in the face of stressors (Gardiner & Iarocci, 2012; Lloyd & Hastings, 2008). Family resilience is defined as "the positive behavioral patterns and functional competence individuals and the family unit demonstrate under stressful or adverse circumstances, which determine the family's ability to recover by maintaining its integrity as a unit while insuring, and where necessary restoring, the well-being of family members and the family unit as a whole (McCubbin & McCubbin, 1996, p. 5; as cited in VanBreda, 2001)". In the Resiliency Model of Family Stress, Adjustment, and Adaptation, McCubbin and McCubbin (1996) suggest that family hardiness plays a central role in the process of overall resilience. Hardiness is seen as a family characteristic, defined by a family's sense of

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control over life events and stressors, perception of change as beneficial, active orientation to adapting to stressors, and confidence that they can endure challenges (McCubbin, McCubbin, & Thompson, 1987). Hardiness is thus related to stressors, as well as to positive outcomes.

Preliminary investigations into family hardiness have compared hardiness in different parent groups and identified associations among hardiness and other psychological constructs using cross sectional methods. Mothers of children with ASD report less hardiness than mothers of children with intellectual disabilities or typically developing children, and such hardiness is associated with lower levels of depression, anxiety and feelings of depersonalization (Weiss, 2002). Increased family hardiness is associated with less stress in parents of children with ASD (Gill & Harris, 1991; Plumb, 2011). In families of individuals with intellectual disabilities, hardiness is related to social support (Failla & Jones, 1991), caregiver self-efficacy (Snowdon, Cameron, & Dunham, 1994), and reduced maternal distress (Ben-Zur, Duvdevany, & Lury, 2005).

These studies were among the first to draw a link between hardiness and parent functioning, but none have explored the mechanisms that lead us from the experience of a chronic stressor, to hardiness, and to negative parent outcomes. Such detailed understanding of how variables may mediate the perception of hardiness and related outcomes can help inform interventions targeted to supporting families of individuals with ASD. As past studies indicate that hardiness is a construct correlated with the presence of a stressor (i.e., behavior problems), outcomes (i.e., distress), and variables typically conceptualized as mediators in stressor–outcome models (i.e., social support, self-efficacy), we hypothesize that hardiness can function as a mediator of the stressor–outcome relationship in parents of individuals with ASD. We view a mediator as a variable that accounts for the relations between a predictor and the outcome(s) (Baron & Kenny, 1986). As chronic stressors such as negative life events or child problem behaviors increase, we expect parents to report lower levels of family hardiness, which would account for more negative outcomes. No study has included hardiness as a mediator variable to date.

We aim to further address the question of *how* stressors are related to hardiness, by examining its relationship with perceived social support and self-efficacy. This is a very important question because without understanding what contributes to family hardiness, we cannot help increase resilience to the chronic stressors that parents of people with ASD experience. For example, stressors may be negatively related to hardiness because they serve to isolate a person and reduce their experience of perceived social support (Donenberg & Baker, 1993). Social support is viewed as the provision of physical, emotional, informational and instrumental assistance that is appraised as helpful and as part of one's social network (Dunst, Trivette, & Cross, 1986). Social support has been linked to both positive and negative outcomes in mothers of children with ASD (Ekas et al., 2010; Smith, Greenberg, & Seltzer, 2012), and can serve to increase a family's level of perceived resilience (Bozo, Anahar, Ateş, & Etel, 2010).

Chronic stressors may also adversely influence a parent's sense of self-efficacy by altering a person's belief that they are effective in changing their situation (Endler, Kocovski, & Macrodimitris, 2001). Parent self-efficacy is broadly defined as an individual's self-appraisal of competency in a parenting role (Bandura, 1977; Coleman & Karraker, 1998). A belief that one lacks the knowledge or ability to manage stressors may be related to a lack of perceived family control over problems and a sense of hopelessness regarding the situation; hallmarks of a lack of family hardiness. Both social support and self-efficacy can also be targets for interventions, making them promising process variables to study.

We first hypothesize that hardiness will function as a mediator of the stressor–outcome relationship, with stressors being operationalized by the cumulative experience of child aggressive behavior and negative life events, and outcome operationalized by family distress. We then test the hypothesis that perceived social support and self-efficacy will function as mediators of the stressor–hardiness relationship. We used a structural equation modeling (SEM) approach to help identify the relative contributions of social support and self-efficacy in explaining hardiness (see Baron & Kenny, 1986; Preacher, Rucker, & Hayes, 2007 for a discussion of mediators). In the mediation model, hardiness is used to explain the relationship between the stressor and distress and why, when considering hardiness, the relationship between stress and distress becomes smaller. The variables are considered correlated, rather than independent influencers on the strength of the association between stress and parent outcome, which would be the case for moderation analysis.

1. Methods

1.1. Participants

Participants included 138 mothers of children diagnosed with an ASD aged 4–41 years (84.1% boys; *M* age = 13.13, *SD* = 6.75). Parents were asked to report on whether their child was diagnosed with Asperger Syndrome (31%), PDD-NOS (18%), or Autism (49%). Inclusion criteria based on parent report of ASD has been used in past reports of parent and child mental health (Totsika, Hastings, Emerson, Berridge, & Lancaster, 2011). Mothers' ages ranged from 31 to 71 years (*M* age = 44.28, *SD* = 7.18). Socioeconomic status was estimated based on the median income associated with participants' forward sortation area of postal codes (first three digits), using Statistics Canada's 2006 Canadian Census (Statistics Canada, 2006). Median incomes ranged from $31,537 to $104,207 CAD, with an overall average of approximately $66,547 CAD (median = $63,018; *SD* = $16,281). Parents were also asked to rate on a four-point scale if they have difficulty paying their monthly bills, from "No difficulty" (1) to "Great deal of difficulty" (4): 38% percent of parents reported no difficulty paying monthly bills, 20% had a little difficulty, and 35% had 'some' or 'a great deal' of difficulty. Most participants lived in Ontario (71%), followed by Saskatchewan (6%) and British Columbia (5%). English was the first language for 91% of the sample. With respect to ethnicity, 88% of participants identified as of European Canadian background.