

Self-Compassion and Well-Being in Parents of Children with Autism

Kristin D. Neff · Daniel J. Faso

© Springer Science+Business Media New York 2014

Abstract Parents of children with autism are faced with difficult and unique daily stressors associated with their child's disorder. The personal characteristics of parents can influence how they approach stressful life events and potentially help them cope with some of the deleterious effects associated with extreme stress. One factor that may be an important coping strategy is self-compassion, which involves being kind to oneself in times of difficulty, recognizing the shared nature of human suffering, and being mindfully aware of negative thoughts and emotions. This study examined the association between self-compassion and well-being in 51 parents of a child with autism using self-report measures. Self-compassion was positively associated with life satisfaction, hope, and goal reengagement and negatively associated with depression and parental stress. Even though child symptom severity is often the strongest predictor of negative adjustment for parents, self-compassion universally predicted parental well-being over and above the effects of child symptom severity. Results suggest that self-compassion may play a significant role in well-being for parents of children with autism. Implications for future research and applications of the construct of self-compassion are discussed.

Keywords Self-compassion · Autism · Life satisfaction · Parental stress · Depression

K. D. Neff (✉)
Department of Educational Psychology, University of Texas at Austin, D5800 University Station, Austin, TX 78712, USA
e-mail: kristin.neff@mail.utexas.edu

D. J. Faso
School of Behavioral and Brain Sciences, University of Texas at Dallas, Dallas, TX, USA

Introduction

Parents who raise a child with autism are faced with unique challenges. Autism spectrum disorder (ASD) is characterized by a triad of impairments in social interaction, communication, and flexible behaviors (including restricted and repetitive behaviors and interests). Manifestations of ASD vary greatly depending on the developmental level and chronological age of the child and may include a number of behavioral symptoms such as hyperactivity, impulsivity, aggression, self-injurious behavior, temper tantrums, and delayed toilet training (Duarte et al. 2005). Parents of autistic children tend to report lower quality of life, more depression, and greater pessimism about the future than parents of typically developing children, as well as parents of children with other developmental disabilities (Cappe et al. 2011; Johnson et al. 2011). A recent meta-analysis found that parents of autistic children also had higher levels of parenting stress compared to others, with large effect sizes indicated (Hayes and Watson 2013). The severity of a child's autism symptoms and behaviors has consistently been found to be one of the strongest predictors of parental stress (Davis and Carter 2008; Ingersoll and Hambrick 2011; Lyons et al. 2010).

Another factor impacting parental well-being is the shame often experienced by parents of children with autism. For instance, parents may receive censure and disapproval from strangers for not being able to “control” their child (Gray 1993; Mak and Kwok 2010). Because they have no physical markers of their condition, many just assume that the child is misbehaving. Judgment from others is often internalized into self-blame for not being a more effective parent (Fernandez and Arcia 2004). Parents may feel that they are not making the right treatment choices, especially given the constant advice from others about what treatments they “should” be trying (Miller et al. 2012). They may also experience feelings of guilt for not doing enough for their autistic child—and for not

doing enough for their typically developing children (Kuhn and Carter 2006). Parents may even irrationally blame themselves for causing their child's condition in the first place (Fernandez and Arcia 2004). This cascade of shame, guilt, and self-blame is a major contributor to parenting stress, depression, and anxiety (Cappe et al. 2011; Mak and Kwok 2010).

Parents vary substantially in their ability to successfully respond to the challenges of having an autistic child. Some parents experience significant mental health problems, while others may have relatively few difficulties (Hastings and Taunt 2002). Perry's (2004) model of stress in parents of children with disabilities proposes that parental outcomes are influenced in part by internal coping resources. For example, Lyons et al. (2010) found that while autism symptom severity was the strongest and most consistent predictor of the stress experienced by parents of autistic children, coping styles moderated the relationship between autism symptoms and parental stress.

One factor that has recently been examined in terms of parental coping with autism is mindfulness. Broadly defined, mindfulness refers to the self-regulation of attention in the present moment while maintaining a stance of openness and curiosity (Bishop et al. 2004). Mindfulness-based interventions have been shown to reduce stress among parents of children with developmental disabilities in general (Bazzano et al. 2013; Myers et al. 2014) and among parents of children with autism in particular (Coatsworth et al. 2010; Singh et al. 2006, 2007, 2014). Trait mindfulness has also been linked to greater well-being among parents of autistic children (Conner and White 2014; Jones et al. 2014).

Self-compassion—a construct closely related to mindfulness—has not received much attention in the research literature as it relates to parents of autistic children. Neff (2003b) proposed that self-compassion is comprised of three interacting components: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus overidentification. Self-kindness entails being gentle, supportive, and caring toward the self in times of distress rather than attacking and berating oneself for personal shortcomings. Common humanity involves recognizing that all people make mistakes and experience hardship in their lives, rather than feeling isolated by one's suffering. Mindfulness in the context of self-compassion involves being aware of painful thoughts and emotions with clarity and balance, neither ignoring nor ruminating on negative aspects of oneself or one's life. Although mindfulness is a core component of self-compassion, the latter construct also entails feelings of sympathy and interconnectedness.

The body of research on self-compassion is rapidly expanding due to its strong link with mental health (see Barnard and Curry (2011) for a review). In fact, a recent meta-analysis by MacBeth and Gumley (2012) documented

a large effect size for the relationship between self-compassion and common expressions of psychopathology such as depression, anxiety, and stress. Self-compassion is also linked to positive psychological outcomes such as happiness, optimism, and life satisfaction (Hollis-Walker and Colosimo 2011; Neff et al. 2008). Research suggests that being self-compassionate is a strong predictor of motivation, leading to greater perceived confidence and less fear of failure (Neff et al. 2005; Smeets et al. 2014), as well as more persistence and goal reengagement after failure (Breines and Chen 2012; Neely et al. 2009). Self-compassion is linked to healthier behaviors in terms exercise, eating well, and moderate alcohol use (Brooks et al. 2012; Magnus et al. 2010; Schoenefeld and Webb 2013). Self-compassion also appears to be a powerful source of coping and resilience when faced with life stressors such as divorce (Sbarra et al. 2012), HIV status (Kemppainen et al. 2013), negative social evaluation (Breines et al. 2014), trauma (Vettese et al. 2011), and combat exposure (Dahm 2013). By treating oneself with kindness and care, remembering that suffering is part of the shared human experience, self-compassionate individuals have more emotional resources available to successfully meet life challenges. For this reason, self-compassion is likely to play a role in the ability of parents to cope with the challenges of raising an autistic child (Neff 2011).

No study has focused specifically on the link between self-compassion and well-being among parents of children with autism to our knowledge. However, one study has examined the link between self-compassion and general parenting stress in parents of nondisabled children. Moreira et al. (2014) found that self-compassion was negatively linked to parenting stress and that parenting stress mediated the positive association found between self-compassion and child well-being. Also, a few studies with a focus on mindfulness among parents of disabled children have included self-compassion as an outcome variable. Research suggests that mindfulness training for parents of children with developmental disabilities boosts self-compassion in addition to increasing well-being and reducing stress (Bazzano et al. 2013; Benn et al. 2012). In fact, Bögels et al. (2010) argued that increased self-compassion may be a key mechanism by which mindfulness-based interventions are effective for parents of autistic children. Because parents devote so much time and energy to caring for their autistic child, self-compassion is thought to create a healthier balance by helping parents to nourish and take emotional care of themselves. Duncan et al. (2009) included self-compassion in their model of mindful parenting. A recent study (Beer et al. 2013) examined this model among parents of autistic children using an adapted version of Duncan's (2007) Mindful Parenting Scale, which includes items measuring compassion for oneself and one's child. These items were significant predictors of parental stress. Note that Duncan's original scale was never published or validated. Although a Dutch version

of the scale has recently been published (de Bruin et al. 2014), its scale structure differs from the original. The Beer et al. (2013) findings, therefore, while providing clues about the role of self-compassion among parents of autistic children, need to be interpreted with caution.

Given that self-compassion is a modifiable trait (Neff and Germer 2013; Smeets et al. 2014) that offers a potential coping resource for parents, the goal of the current study was to directly examine the link between self-compassion and well-being in parents of autistic children using the Self-Compassion Scale (Neff 2003a, b), a well-established measure of self-compassion. We hypothesized that self-compassion would be associated with positive outcomes for parents such as greater life satisfaction. When parents bring a sense of care and connectedness to their experience of raising an autistic child, it should make their lives richer and more meaningful (Cappe et al. 2011). It should also increase their hope for the future. Snyder et al. (1991) argued that human behavior is primarily goal driven and define hope as the perception that one can attain one's future goals. While parents of children with autism often face challenges that undermine hopefulness and increase worry about the future (Lloyd and Hastings 2009; Faso et al. 2013), the increased feelings of self-efficacy and reduced tendency to ruminate on negative thoughts and emotions associated with self-compassion should help counter this trend (Neff 2003a; Neff et al. 2005).

We expected that self-compassion would be linked to greater goal reengagement among parents. Goal reengagement refers to the tendency to pursue new goals when prior goals are unattainable (Wrosch et al. 2003) and has been found to predict psychological well-being among parents of children with autism and cancer (Sprangers and Schwartz 1999; Wrosch et al. 2003). Given that parents of autistic children have to give up many of their dreams to care for their child, the ability to find new, more realistic pursuits can offer an important sense of purpose. Self-compassion has previously been linked to increased goal reengagement among college students (Neely et al. 2009), and we expected to find the same association among parents of autistic children.

We hypothesized that self-compassionate parents would also experience fewer negative psychological outcomes. In particular, we expected that they would suffer from less depression, a finding that would be consistent with prior literature indicating a strong negative link between self-compassion and psychopathology (MacBeth and Gumley 2012).

Another key goal of this study was to determine if self-compassion was linked to stress among parents of children with autism. Abidin (1995) proposed that parental stress is a complex construct that represents a combination of parent and child characteristics. There are three main types of parental stress according to this model, all of which should be negatively associated with self-compassion. One is the parental

distress directly generated from caring for one's child, such as perceived incompetence, restrictions on life roles, and feelings of isolation. Self-compassion should reduce parents' distress levels by providing a sense of self-efficacy, self-acceptance, and feelings of connectedness to common humanity in their roles as caregivers. Another form of stress is the functionality of parent-child interactions—the extent to which the child meets parental expectations of behavior and emotional connection so that interactions are positively rewarding to the parent. We hypothesized that self-compassion would lead to more satisfying parent-child interactions given that parents are able to give themselves and their child compassion and understanding when disappointments occur. Stress also stems from perceptions of one's child as difficult in terms of behaviors like defiance or noncompliance or making unwanted demands. Self-compassionate parents should be less likely to view their child's behaviors as frustrating and difficult given their internal coping resources, which should allow them to be less overwhelmed and stressed as a result.

Because the severity of children's autism symptoms have been shown to negatively impact parental well-being (Davis and Carter 2008; Ingersoll and Hambrick 2011; Lyons et al. 2010), we wanted to determine if self-compassion would predict outcomes over and above the impact of autism symptom severity. We hypothesized that self-compassion would be an even stronger predictor of parental well-being than symptom severity, given that the way parents relate to themselves internally may have a more direct impact on mental well-being than the external circumstances they face.

Method

Participants

Our selection criterion was that participants needed to be the biological parent of a child diagnosed with ASD and be between the ages of 4–12. In total, 51 parents (40 mothers, 11 fathers) completed the full battery of survey instruments included in this study. Participants ranged in age from 25 to 54 (*M* age of mothers = 39.90, *SD* = 6.11; *M* age of fathers = 42.27, *SD* = 7.47). The sample was 80 % Caucasian, 12 % Hispanic/Latino, 4 % African-American, and 4 % Asian or Native American. Parents were generally well educated: 29 % had a graduate or professional degree, 39 % had a bachelor's degree, 26 % had some college or vocational schooling, and 6 % had a high school diploma or GED. Parents were primarily middle to upper-middle class in terms of household income: 45 % of families earned over \$100,000 annually, 44 % earned between \$50,000 and \$100,000, and only 12 % earned less than \$50,000 annually.

Procedure

This study was conducted in conjunction with a research project that recruited parents of children with ASD through the University of Texas Autism Project (Faso et al. 2013). This research was approved by the Institutional Review Board of the University of Texas at Austin, and participant informed consent was obtained. Parents were contacted via e-mail and given information about the current study and instructions for how to complete the questionnaire online using SurveyMonkey. In recognition of the time needed to participate in this study, parents were entered into a raffle for a Kindle.

Measures

Autism Symptom Severity ASD symptom severity was assessed with the Gilliam Autism Rating Scale 2nd edition (Gilliam 2006), a 42-item measure that asks parents to report on the frequency with which they observe symptoms associated with autism spectrum disorders. The instrument assesses the behavioral symptom severity along a spectrum of difficulties consistent with the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association 2013). The scale uses three subscales to assess distinct groups of symptoms: social interaction, communication, and stereotyped behaviors. Higher standard scores for each subscale equate to more severe symptoms related to autism, and this measure has shown high reliability and validity when assessing the presence of autism in children (Eaves et al. 2006). In this study, average symptom severity score was used to assess total impact of behavior difficulties.

Self-Compassion Participants were given the Self-Compassion Scale (SCS; Neff 2003a), a self-reported, 26-item measure with responses ranging from 1 (*almost never*) to 5 (*almost always*). It contains six subscales: self-kindness (e.g., I try to be loving toward myself when I'm feeling emotional pain), self-judgment (e.g., I'm disapproving and judgmental about my own flaws and inadequacies), common humanity (e.g., When things are going badly for me, I see the difficulties as part of life that everyone goes through), isolation (e.g., When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world), mindfulness (e.g., When I'm feeling down I try to approach my feelings with curiosity and openness), and over-identification (e.g., When I'm feeling down I tend to obsess and fixate on everything that's wrong). The subscales of the SCS may be examined separately, or else a total self-compassion score can be used given that a single higher-order factor of "self-compassion" has been found to explain the intercorrelations between subscales (Neff 2003a). Note that the self-judgment, isolation, and overidentification

subscales of the SCS are reverse coded so that higher scores indicate higher levels of self-compassion. The scale demonstrates convergent validity (e.g., correlates with partner ratings), discriminant validity (e.g., no correlation with social desirability), and good test-retest reliability (Neff 2003a; Neff and Beretvas 2013).

Life Satisfaction Participants were given the Satisfaction with Life Scale (SWLS; Diener et al. 1985), a five-item self-report scale that measures an individual's perceptions of current life satisfaction. Using a 7-point scale, parents reported the extent to which they agreed with each statement (e.g., "If I could live my life over, I would change almost nothing," with higher scores equating to higher life satisfaction. High internal consistency has been found in previous studies employing this measure (Diener et al. 1985).

Hope Hope was assessed using the Adult Hope Scale (Snyder et al. 1991), a 12-item measure of an individual's hope for the future. The scale has two four-item subscales—hope pathways (e.g., "There are lots of ways around any problem") and hope agency (e.g., "My past experiences have prepared me well for my future"). Four filler items are also included in the scale but disregarded for scoring. Responses are given on an 8-point scale where "1=definitely false" and "8=definitely true." Subscale scores were summed, and the average was taken to obtain the total hope score used in this study. Previous studies employing this measure have demonstrated good internal consistency in similar populations (Lloyd and Hastings 2009).

Goal Reengagement This study used the reengagement subscale of the Goal Disengagement and Goal Reengagement Scale (Wrosch et al. 2003). All items in this six-item subscale are prefaced by the prompt, "If I have to stop pursuing an important goal in my life, ..." then followed by a stem such as "I put effort toward other meaningful goals." Parents indicated their response on a 5-point Likert scale ranging from 1 (almost never true) to 5 (almost always true). The Goal Reengagement Scale has shown strong validity and reliability across numerous studies and populations (Wrosch et al. 2003).

Depression To measure the degree of current depressive symptoms, parents completed the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977), a 20-item self-report scale measuring depressive symptoms experienced by the parent in the past week. Parents indicated how often they have felt or behaved in certain ways ranging from "1=rarely or none of the time (less than 1 day)" to "4=most of all of the time (5–7 days)." A sample item is "I felt that I could not shake off the blues even with the help of my family or friends." Positively worded items are reversed scored, and higher scores represent more depressive symptoms overall.

Previous studies have reported good reliability and validity for this measure, as well as high internal consistency (Radloff 1977).

Parenting Stress The Parenting Stress Index-Short Form (PSI-SF; Abidin 1995) is a 36-item questionnaire designed to measure the stress an individual feels within a parenting role. The PSI-SF consists of three subscales (parental distress, parent-child dysfunctional interaction, difficult child), each containing 12 statements that are rated by parents from 1 (strongly disagree) to 5 (strongly agree). The parental distress subscale contains items that pertain to feeling incompetent, restricted, or isolated in one's role as a parent. Sample items are "I often have the feeling that I cannot handle things very well" and "I give up my life to meet my child's needs." The parent-child dysfunctional interaction subscale (referred to as relationship dysfunction) reflects the nature of parental attitudes toward interactions with their child and the degree to which the parent feels their child is meeting expectations. Sample items are "Most times I feel that my child does not like me and does not want to be close to me" and "My child is not able to do as much as I expected." The difficult child subscale (referred to as perceived child difficulty) assesses the parent's view of their child's behaviors, such as defiance or noncompliance, and the demands the parent believes their child imposes. Sample items are "There are some things my child does that really bother me a lot" and "My child gets upset over the smallest things." This scale has demonstrated high internal consistency and moderate test-retest reliability and has been utilized in previous studies examining outcomes for parents of children with autism (e.g., Davis and Carter 2008; Faso et al. 2013; Kuhn and Carter 2006).

Results

Table 1 presents the means, standard deviations, and Cronbach's alpha for all study variables. Table 2 presents the zero-order correlations between variables, including age and sex. Note that autism symptom severity was not linked to age or sex and that self-compassion was significantly associated with age but not sex. The positive association between self-compassion and age replicates findings of previous studies (Albertson et al. 2014; Neff and Pommier 2013) and suggests that increased self-compassion is one benefit of greater maturity. Also, symptom severity and self-compassion were not significantly correlated. This suggests that having a more severely autistic child does not necessarily lead to the lack of self-compassion. As expected, higher levels of self-compassion were associated with greater well-being among parents of children with autism. Self-compassion showed significant associations with all outcome variables: positive

Table 1 Means, standard deviations, and Cronbach's alphas for all study variables

| Variables | <i>M</i> | <i>SD</i> | α |
|-------------------------------|----------|-----------|----------|
| 1. Symptom severity | 27.16 | 8.05 | 0.92 |
| 2. Self-compassion | 3.11 | 0.75 | 0.86 |
| 3. Life satisfaction | 4.39 | 1.38 | 0.87 |
| 4. Hope | 4.41 | 0.60 | 0.87 |
| 5. Goal reengagement | 3.68 | 0.84 | 0.92 |
| 6. Depression | 1.73 | 0.52 | 0.93 |
| 7. Parental distress | 2.85 | 0.84 | 0.87 |
| 8. Relationship dysfunction | 2.49 | 0.68 | 0.78 |
| 9. Perceived child difficulty | 3.42 | 0.80 | 0.88 |

correlations with life satisfaction, hope, and goal reengagement and negative correlations with depression, parental distress, relationship dysfunction, and perceived child difficulty. Autism symptom severity was significantly linked to depression, parental distress, and relationship dysfunction, but not the three positive outcomes of life satisfaction, hope, or goal reengagement.

In order to determine whether self-compassion predicted well-being beyond that accounted for by autism symptom severity, we conducted a series of regression analyses. Standardized residuals were created for each variable after regressing out age and sex in order to control for these factors. We then conducted step-wise regressions in which symptom severity was entered in the first step, and self-compassion was entered in the second step (see Table 3). Mirroring what was found for the zero-order correlations, symptom severity significantly predicted depression, parental distress, and relationship dysfunction, but not life satisfaction, hope, or goal reengagement. When self-compassion was entered in step 2, significant additional variance was explained for all outcomes. After adding in self-compassion, moreover, symptom severity was no longer a significant predictor of depression. Both self-compassion and symptom severity were significant predictors of parental distress and relationship dysfunction. An examination of their partial correlations revealed that self-compassion was a significantly stronger predictor of parental distress, while symptom severity and self-compassion did not significantly differ as predictors of relationship dysfunction. We also examined whether behavioral severity and self-compassion interacted when predicting outcomes, and no significant interaction effects were found (all $ps > 0.05$).

Discussion

This study examined the link between self-compassion and well-being among parents of autistic children and found that parents with higher levels of self-compassion were more

Table 2 Bivariate correlations for variables ($N=51$)

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------------------------|-------|-------|--------|---------|---------|---------|-------|--------|--------|--------|
| 1. Age | – | | | | | | | | | |
| 2. Sex | 0.15 | – | | | | | | | | |
| 3. Symptom severity | –0.20 | –0.03 | – | | | | | | | |
| 4. Self-compassion | 0.34* | –0.14 | –0.18 | – | | | | | | |
| 5. Life satisfaction | 0.18 | –0.02 | –0.17 | 0.35* | – | | | | | |
| 6. Hope | 0.05 | –0.05 | –0.15 | 0.45* | 0.38** | – | | | | |
| 7. Goal reengagement | 0.22 | –0.08 | 0.14 | 0.33* | 0.13 | 0.40** | – | | | |
| 8. Depression | –0.21 | 0.25 | 0.29* | –0.65** | –0.49** | –0.51** | –0.16 | – | | |
| 9. Parental distress | –0.17 | 0.14 | 0.37** | –0.66** | –0.52** | –0.35* | –0.21 | 0.70** | – | |
| 10. Relationship dysfunction | –0.16 | 0.19 | 0.46** | –0.35* | –0.35* | –0.27 | –0.01 | 0.51** | 0.59** | – |
| 11. Perceived child difficulty | –0.18 | 0.14 | 0.25 | –0.35* | –0.25 | 0.12 | 0.10 | 0.25 | 0.55** | 0.59** |

* $p \leq 0.05$; ** $p \leq 0.01$

emotionally resilient than those with lower levels of self-compassion. Self-compassion was associated with greater life satisfaction among participants. The sense of kindness, connection, and presence that is inherent in self-compassion appears to provide a sense of meaning and fulfillment even when parents are faced with the challenges of raising an autistic child. Self-compassion generates uplifting emotions by extending goodwill toward oneself in the midst of suffering, and these feelings may extend to one's life more generally (Neff et al. 2007). Results indicated that parents with higher levels of self-compassion were also more hopeful about the future. Although parents of autistic children often worry about the future and lose hope, the inner support and self-confidence engendered by self-compassion appear to help parents have a more optimistic outlook. Also, because self-compassionate individuals are mindfully aware of negative thoughts and emotions rather than ruminating about them, they may be less likely to become absorbed by the dramatic storylines that can lead to worry and despair. Similarly, self-compassion predicted more goal reengagement among participants. Parents

sometimes have to abandon their personal life goals due to the constraints of raising an autistic child. Self-compassion, however, provides a safety net when such setbacks occur. When faced with the disappointment of not achieving desired goals, the ability to comfort and support oneself appears to give parents the emotional resources needed to try something new. Taken together, these findings suggest that self-compassion is a coping resource that can lead to positive gains when raising a child with autism (Hastings and Taunt 2002).

As has been found in previous research, self-compassion had a strong negative association with depression (MacBeth and Gumley 2012). There are several reasons why this makes sense, especially within the context of parenting an autistic child. Depression among parents of children with autism is often fueled by feelings of shame, self-blame, and grief (Cappe et al. 2011; Johnson and O'Brien 2013). Enduring the constant judgment of strangers, feeling that one cannot "get it right" in terms of making wise treatment choices, and experiencing the heartache of an autism diagnosis certainly facilitate feelings of depression (Gray 2003; Miller et al. 2012;

Table 3 Standardized regression coefficients for symptom severity (SS) and self-compassion (SC) predicting outcomes (controlling for age and gender)

| Outcome | Step 1 | | Step 2 | | |
|----------------------------|-----------------|--------|-----------------|----------------|--------------|
| | BEH <i>B</i> | R^2 | BEH <i>B</i> | SC <i>B</i> | ΔR^2 |
| Life satisfaction | –0.14 | 0.02 | –0.10 | 0.31* | 0.09* |
| Hope | –0.15 | 0.02 | 0.09 | 0.45** | 0.20** |
| Goal reengagement | 0.20 | 0.04 | 0.24 | 0.32* | 0.10* |
| Depression | 0.28* | 0.08* | 0.21 | –0.60** | 0.35** |
| Parental distress | 0.36** | 0.13** | 0.28* | –0.61** | 0.36** |
| Relationship dysfunction | 0.46** | 0.21** | 0.43** | –0.25* | 0.06* |
| Perceived child difficulty | 0.23 | 0.05 | 0.20 | –0.28* | 0.08* |

* $p \leq 0.05$; ** $p \leq 0.01$

Myers et al. 2009). The ability to compassionately accept oneself and one's life as it is, comfort oneself during trying times, and bring kindness and understanding toward oneself even in the face of failure helps provide the strength needed to navigate challenges of autism without becoming despondent. Moreover, self-compassion protects against rumination and self-criticism (Neff 2003a)—two factors that are strongly linked to depression (Blatt et al. 1982; Nolen-Hoeksema and Morrow 1993).

Self-compassionate parents had better outcomes for all three types of parenting stress compared to those with lower levels of self-compassion, confirming the findings of Beer et al. (2013). First, they reported less personal distress than those lacking self-compassion, meaning they felt more effective, less restricted, and less isolated in their role as a parent. Instead of feeling incompetent after making a bad decision, self-compassion allows one to clearly see and acknowledge mistakes without taking them too personally (Leary et al. 2007; Neff et al. 2005). The care and support offered by self-compassion can help parents feel less overwhelmed and restricted by the challenges of raising an autistic child. And by remembering that suffering is a universal human experience, parents of children with autism feel less cut off from others. Thus, self-compassion offers a powerful buffer against the personal distress that can arise when parenting an autistic child.

Self-compassionate parents also reported having more functional relationships with their children, meaning that they did not find their interactions as disappointing or emotionally disconnected. Self-compassionate individuals have been shown to have healthier and more satisfying romantic relationships and are described by their partners as being more intimate and accepting and less demanding and controlling (Neff and Beretvas 2013). It appears that this relational stance may extend to the parenting context. Because self-compassionate people accept themselves as imperfect human beings, they may be more inclined to accept the limitations of others in relationships. And because they are able to meet many of their needs for care and connection internally, parents may be less dependent on having these needs met by their children.

Finally, we found that self-compassionate parents were less likely to see their child's behaviors as difficult and problematic. If parents self-soothe when their children display typical autistic behaviors such as tantrums, aggression, obsessiveness, or inflexibility, maintaining mindful awareness of the situation and remembering that challenges are part of life, they are likely to be less bothered and frustrated in response. This might mean that these behaviors are perceived as less troubling in and of themselves, a finding supported by previous research reporting that parenting stress is often the product of an individual's perceptions of life stressors (Faso et al. 2013; Kashdan et al. 2002).

Another aim of this study was to compare the relative impact of parents' levels of self-compassion and the severity of children's autism symptoms on parental well-being. A large body of research indicates that the intensity of autism symptoms negatively impacts the stress and mental health of parents (e.g., Davis and Carter 2008; Herring et al. 2006; Ingersoll and Hambrick 2011; Lyons et al. 2010). In the current study, we found that symptom severity significantly predicted depression among parents and two aspects of parenting stress—personal distress and dysfunctional relationship interactions. We found that it did not predict perceptions of child behaviors as difficult, however, which may seem counterintuitive. While the reasons for this finding are unclear, it may be because the difficult child subscale of the parental stress index focuses more on how bothered parents are by their children's behaviors rather than the difficulty of child behaviors themselves. In fact, a series of studies assessing the PSI-SF found the difficult child subscale to be the least discriminating in terms of types of parental stress (Zaidman-Zait et al. 2010, 2011).

Results indicated that symptom severity was also a nonsignificant predictor of the positive psychological outcomes of life satisfaction, hope, goal reengagement, or self-compassion itself. The tendency for autism symptom severity to be a stronger predictor of negative rather than positive outcomes for parents is consistent with prior research (Hastings and Taunt 2002; Hastings et al. 2005; Jones et al. 2014), even though the mechanism driving this association is unclear. The child behaviors captured within autism symptom severity scores (e.g., tantrums and excessive self-stimulation) have been shown to relate to shorter-term negative parental adjustment (Pelham et al. 1998; Stuart and McGrew 2009), whereas the positive outcomes assessed in this study may have more trait-like characteristics that are less impacted by autism severity. For instance, our measure of depression (i.e., CES-D) is an assessment of depressive symptoms expressed in recent weeks and may fluctuate with recently expressed extreme child behaviors, whereas self-compassion may be more stable over time. More research will be needed to understand this issue.

It should be noted that for every single outcome variable examined except relationship dysfunction, self-compassion was a stronger predictor of parental well-being than the severity of their child's autism. In other words, the degree of difficulty faced by parents of autistic children does not appear to be as important to parental well-being as how parents *relate* to themselves in the midst of those difficulties. It is interesting to consider why relationship dysfunction appeared to be an exception to this pattern. Perhaps the factors that largely determine the quality of relationship interactions such as the child's tendency to show affection, be aggressive, communicate, etc. are more directly influenced by child characteristics. Even so, the study found that parental levels of self-

compassion make an equally strong contribution to how satisfying parents find their relationship with their child to be.

Limitations and Future Directions

The findings from this study should be viewed in the context of several limitations. First, participant selection was based on a convenience sample of volunteers from the community, most of whom were highly educated and had above average incomes. Research suggests that a more economically diverse population may have yielded different results (Park et al. 2002), and therefore, our findings may not generalize to all populations. In addition, all data were obtained through self-reports from parents and potential response biases may have occurred when answering sensitive questions. This reliance on parental self-report may have also undermined the accurate assessment the child's autism symptom severity, which should ideally be evaluated by a mental health professional. The sample size was relatively small, moreover, limiting the power of the study to identify significant findings. Future research should attempt to address these shortcomings.

It might also be fruitful to compare self-compassion and mindfulness as predictors of well-being among parents of autistic children. Research with the general population has found that self-compassion is a stronger negative predictor of anxiety, worry, and depression and a stronger positive predictor of quality of life and overall psychological well-being (Baer et al. 2012; Van Dam et al. 2011). Self-compassion adds the important elements of self-kindness and common humanity to mindfulness alone, which may lead to improved outcomes for parents of children with autism. It may also be worth examining whether increased parental self-compassion impacts the well-being of autistic children themselves. Singh et al. (2006, 2011, 2014) have conducted a series of studies suggesting that caregivers undergo an inner transformational change as a result of the mindfulness training that benefits their interactions with children and child functioning. The same may be true with self-compassion. When parents experience caring, connection, and mindful presence, they are likely to be more skillful in their parenting behaviors and more accepting of their children's differences.

In her book *Self-Compassion*, Neff (2011) wrote about her own experience of raising an autistic child. "I can tell you from first hand experience what a life-saver self-compassion can be. It pulled me back from the precipice of despair over and over again as I struggled to deal with Rowan's autism. When my mind would start to walk down the dark alley of fear—*What's going to happen to him? Will he ever live independently?*... I would try to stay in the present moment. *I am right here, right now. Rowan is safe and happy... Let me focus on calming and comforting myself...* When I soothed my troubled mind with this kind of caring concern, I was able to

stay centered without being overwhelmed, realizing that whatever Rowan's future held, I loved him exactly as he was" (p. 105).

References

- Abidin, R. R. (1995). *Parenting stress index* (3rd ed.). Odessa: Psychological Assessment Resource.
- Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2014). Self-compassion and body dissatisfaction in women: a randomized controlled trial of a brief meditation intervention. *Mindfulness*, 1–11.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association.
- Baer, R. A., Lykins, E. B., & Peters, J. R. (2012). Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and matched nonmeditators. *The Journal of Positive Psychology*, 7(3), 230–238. doi:10.1080/17439760.2012.674548.
- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: conceptualizations, correlates, & interventions. *Review of General Psychology*, 15(4), 289–303. doi:10.1037/a0025754.
- Bazzano, A., Wolfe, C., Zylowska, L., Wang, S., Schuster, E., Barrett, C., & Lehrer, D. (2013). Mindfulness Based Stress Reduction (MBSR) for parents and caregivers of individuals with developmental disabilities: a community-based approach. *Journal of Child and Family Studies*, 1–11.
- Beer, M., Ward, L., & Moar, K. (2013). The relationship between mindful parenting and distress in parents of children with an autism spectrum disorder. *Mindfulness*, 1, 1–11.
- Benn, R., Akiva, T., Arel, S., & Roeser, R. W. (2012). Mindfulness training effects for parents and educators of children with special needs. *Developmental Psychology*, 48(5), 1476.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., & ... Devins, G. (2004). Mindfulness: a proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. doi:10.1093/clipsy.bph077.
- Blatt, S. J., Quinlan, D. M., Chevron, E. S., McDonald, C., & Zuroff, D. (1982). Dependency and self-criticism: psychological dimensions of depression. *Journal of Consulting and Clinical Psychology*, 50, 113–124.
- Bögels, S. M., Lehtonen, A., & Restifo, K. (2010). Mindful parenting in mental health care. *Mindfulness*, 1(2), 107–120.
- Breines, J. G., & Chen, S. (2012). Self-compassion increases self-improvement motivation. *Personality and Social Psychology Bulletin*, 38(9), 1133–1143.
- Breines, J., Toole, A., Tu, C., & Chen, S. (2014). Self-compassion, body image, and self-reported disordered eating. *Self and Identity*, 13(4), 432–448. doi:10.1080/15298868.2013.838992.
- Brooks, M., Kay-Lambkin, F., Bowman, J., & Childs, S. (2012). Self-compassion amongst clients with problematic alcohol use. *Mindfulness*, 3(4), 308–317.
- Cappe, E., Wolff, M., Bobet, R., & Adrien, J. (2011). Quality of life: a key variable to consider in the evaluation of adjustment in parents of children with autism spectrum disorders and in the development of relevant support and assistance programmes. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation*, 20(8), 1279–1294.
- Coatsworth, J. D., Duncan, L. G., Greenberg, M. T., & Nix, R. L. (2010). Changing parent's mindfulness, child management skills and relationship quality with their youth: results from a randomized pilot intervention trial. *Journal of Child and Family Studies*, 19, 203–217.

- Conner, C. M., & White, S. W. (2014). Stress in mothers of children with autism: trait mindfulness as a protective factor. *Research in Autism Spectrum Disorders*, 8(6), 617–624.
- Dahm, K. A. (2013). Mindfulness and self-compassion as predictors of functional outcomes and psychopathology in OEF/OIF veterans exposed to trauma. (Unpublished Doctoral Dissertation) The University of Texas, Austin.
- Davis, N. O., & Carter, A. S. (2008). Parenting stress in mothers and fathers of toddlers with autism spectrum disorders: associations with child characteristics. *Journal of Autism and Developmental Disorders*, 38, 1278–1291.
- de Bruin, E. I., Zijlstra, B. J., Geurtzen, N., van Zundert, R. M., van de Weijer-Bergsma, E., Hartman, E. E., ... & Bögels, S. M. (2014). Mindful parenting assessed further: psychometric properties of the Dutch version of the Interpersonal Mindfulness in Parenting Scale (IM-P). *Mindfulness*, 5(2), 200–212.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Duarte, C. S., Bordin, I. A., Yazigi, L., & Mooney, J. (2005). Factors associated with stress in mothers of children with autism. *Autism*, 9, 416–427.
- Duncan, L. G. (2007). Assessment of mindful parenting among parents of early adolescents: development and validation of the Interpersonal Mindfulness in Parenting scale. Unpublished PhD thesis. Pennsylvania State University, US.
- Duncan, L. G., Coatsworth, J. D., & Greenberg, M. T. (2009). A model of mindful parenting: implications for parent–child relationships and prevention research. *Clinical Child and Family Psychology Review*, 12(3), 255–270.
- Eaves, R. C., Woods-Groves, S., Williams, T. r., & Fall, A. (2006). Reliability and validity of the pervasive developmental disorders rating scale and the Gilliam autism rating scale. *Education and Training in Developmental Disabilities*, 41(3), 300–309.
- Faso, Neal-Beevers, A., & Carlson, C. L. (2013). Vicarious futurity, hope, and well-being in parents of children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 7(2), 288–297. doi:10.1016/j.rasd.2012.08.014.
- Fernandez, M. C., & Arcia, E. (2004). Disruptive behaviors and maternal responsibility: a complex portrait of stigma, self-blame, and other reactions. *Hispanic Journal of Behavioral Sciences*, 26, 356e372.
- Gilliam, J. E. (2006). Gilliam autism rating scale Examiners manual, (second ed.) Austin, TX: Pro-Ed Inc.
- Gray, D. (1993). Perceptions of stigma: the parents of autistic children. *Sociology of Health & Illness*, 15(1), 102–120.
- Gray, D. E. (2003). Gender and coping: the parents of children with high functioning autism. *Social Science & Medicine*, 56(3), 631–642. doi:10.1016/S0277-9536(02)00059-X.
- Hastings, R. P., & Taunt, H. M. (2002). Positive perceptions in families of children with developmental disabilities. *American Journal on Mental Retardation*, 107(2), 116–127.
- Hastings, R. P., Kovshoff, H., Brown, T., Ward, N. J., Espinosa, F. D., & Remington, B. (2005). Coping strategies in mothers and fathers of preschool and school-age children with autism. *Autism the International Journal of Research and Practice*, 9, 377–391.
- Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: a meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 43(3), 629–642. doi:10.1007/s10803-012-1604-y.
- Herring, S. S., Gray, K. K., Taffe, J. J., Tonge, B. B., Sweeney, D. D., & Einfeld, S. S. (2006). Behaviour and emotional problems in toddlers with pervasive developmental disorders and developmental delay: associations with parental mental health and family functioning. *Journal Of Intellectual Disability Research*, 50(12), 874–882. doi:10.1111/j.1365-2788.2006.00904.x.
- Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: a theoretical and empirical examination. *Personality and Individual Differences*, 50(2), 222–227. doi:10.1016/j.paid.2010.09.033.
- Ingersoll, B., & Hambrick, D. Z. (2011). The relationship between the broader autism phenotype, child severity, and stress and depression in parents of children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 5(1), 337–344.
- Johnson, E. A., & O'Brien, K. A. (2013). Self-compassion soothes the savage ego-threat system: effects on negative affect, shame, rumination, and depressive symptoms. *Journal of Social and Clinical Psychology*, 32(9), 939–963. doi:10.1521/jscp.2013.32.9.939.
- Johnson, N., Frenn, M., Feetham, S., & Simpson, P. (2011). Autism spectrum disorder: parenting stress, family functioning and health-related quality of life. *Families, Systems and Health*, 29(3), 232–252.
- Jones, L., Hastings, R. P., Totsika, V., Keane, L., & Rhule, N. (2014). Child behavior problems and parental well-being in families of children with autism: the mediating role of mindfulness and acceptance. *American Journal on Intellectual and Developmental Disabilities*, 119(2), 171–185.
- Kashdan, T. B., Pelham, W. E., Lang, A. R., Hoza, B., Jacob, R. G., Jennings, J. R., Blumenthal, J. D., & Gnagy, E. M. (2002). Hope and optimism as human strengths in parents of children with externalizing disorders: stress is in the eye of the beholder. *Journal of Social and Clinical Psychology*, 21(4), 441–468.
- Kempainen, J. J., Johnson, M. O., Phillips, J. C., Sullivan, K. M., Corless, I. B., Reid, P. P., & ... Beamon, E. R. (2013). A multinational study of self-compassion and human immunodeficiency virus-related anxiety. *International Nursing Review*, 60(4), 477–486. doi:10.1111/inr.12056.
- Kuhn, J. C., & Carter, A. S. (2006). Maternal self-efficacy and associated parenting cognitions among mothers of children with autism. *American Journal of Orthopsychiatry*, 76, 564–575.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: the implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92, 887–904.
- Lloyd, T. J., & Hastings, R. (2009). Hope as a psychological resilience factor in mothers and fathers of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 53, 957–968.
- Lyons, A. M., Leon, S. C., Phelps, C. E. R., & Dunleavy, A. M. (2010). The impact of child symptom severity on stress among parents of children with ASD: the moderating role of coping styles. *Journal of Child and Family Studies*, 19, 516–524.
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: a meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32, 545–552.
- Magnus, C. M. R., Kowalski, K. C., & McHugh, T. L. F. (2010). The role of self-compassion in women's self-determined motives to exercise and exercise-related outcomes. *Self and Identity*, 9, 363–382.
- Mak, W., & Kwok, Y. (2010). Internalization of stigma for parents of children with autism spectrum disorder in Hong Kong. *Social Science & Medicine*, 70, 2045–2051.
- Miller, V. A., Schreck, K. A., Mulick, J. A., & Butter, E. (2012). Factors related to parents' choices of treatments for their children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 6(1), 87–95.
- Moreira, H., Gouveia, M. J., Carona, C., Silva, N., & Canavarro, M. C. (2014). Maternal attachment and children's quality of life: the mediating role of self-compassion and parenting stress. *Journal of Child and Family Studies*. doi:10.1007/s10826-014-0036-z.
- Myers, B. J., Mackintosh, V. H., & Goin-Kochel, R. P. (2009). "My greatest joy and my greatest heart ache:" parents' own words on how having a child in the autism spectrum has affected their lives and their families' lives. *Research in Autism Spectrum Disorders*, 3(3), 670–684.

- Myers, R. E., Winton, A. S. W., Lancioni, G. E., & Singh, N. N. (2014). Mindfulness meditation in developmental disabilities. In N. N. Singh (Ed.), *Psychology of meditation* (pp. 209–240). New York: Nova.
- Neely, M. E., Schallert, D. L., Mohammed, S. S., Roberts, R. M., & Chen, Y. (2009). Self-kindness when facing stress: the role of self-compassion, goal regulation, and support in college students well-being. *Motivation and Emotion, 33*, 88–97.
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223–250. doi:10.1080/15298860309027.
- Neff, K. D. (2003b). Self-compassion: an alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*(2), 85–101. doi:10.1080/15298860309032.
- Neff, K. D. (2011). *Self-compassion: the proven power of being kind to yourself*. New York: William Morrow.
- Neff, K. D., & Beretvas, S. (2013). The role of self-compassion in romantic relationships. *Self and Identity, 12*(1), 78–98. doi:10.1080/15298868.2011.639548.
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology, 69*(1), 28–44.
- Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity, 12*(2), 160–176.
- Neff, K. D., Hseih, Y., & Dejithirath, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity, 4*, 263–287.
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality, 41*, 908–916.
- Neff, K. D., Pisitsungakagarn, K., & Hseih, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology, 39*, 267–285.
- Nolen-Hoeksema, S., & Morrow, J. (1993). Effects of rumination and distraction on naturally occurring depressed mood. *Cognition and Emotion, 7*(6), 561–570. doi:10.1080/02699939308409206.
- Park, J., Tumbull, A. P., & Tumbull, H. R. (2002). Impacts of poverty on quality of life in families of children with disabilities. *Exceptional Children, 68*, 151–170.
- Pelham, W. E., Jr., Wheeler, T., & Chronis, A. (1998). Empirically supported psychosocial treatments for attention deficit hyperactivity disorder. *Journal of Clinical Child Psychology, 27*, 190–205.
- Perry, A. (2004). A model of stress in families of children with developmental disabilities: clinical and research applications. *Journal on Developmental Disabilities, 11*, 1–16.
- Radloff, L. S. (1977). The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401.
- Sbarra, D. A., Smith, H. L., & Mehl, M. R. (2012). When leaving your ex, love yourself: observational ratings of self-compassion predict the course of emotional recovery following marital separation. *Psychological Science, 23*(3), 261–269. doi:10.1177/0956797611429466.
- Schoenefeld, S. J., & Webb, J. B. (2013). Self-compassion and intuitive eating in college women: examining the contributions of distress tolerance and body image acceptance and action. *Eating Behaviors, 14*(4), 493–496.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Fisher, B. C., Wahler, R. G., McLeavey, K., Singh, J., & Sabaawi, M. (2006). Mindful parenting decreases aggression, noncompliance and self-injury in children with autism. *Journal of Emotional and Behavioral Disorders, 14*, 169–177.
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Singh, J., Curtis, W. J., Wahler, R. G., & McLeavey, K. M. (2007). Mindful parenting decreases aggression and increases social behavior in children with developmental disabilities. *Behavior Modification, 31*, 749–771.
- Singh, N. N., Lancioni, G. E., Manikam, R., Winton, A. S., Singh, A. N., Singh, J., & Singh, A. D. (2011). A mindfulness-based strategy for self-management of aggressive behavior in adolescents with autism. *Research in Autism Spectrum Disorders, 5*(3), 1153–1158.
- Singh, N. N., Lancioni, G. E., Winton, A. S., Karazsia, B. T., Myers, R. E., Latham, L. L., & Singh, J. (2014). Mindfulness-Based Positive Behavior Support (MBPBS) for mothers of adolescents with autism spectrum disorder: effects on adolescents' behavior and parental stress. *Mindfulness, 5*, 646–657.
- Smeets, E., Neff, K., Albers, H., & Peters, M. (2014). Meeting suffering with kindness: effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology, 70*(1), 1–12.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*, 570–585.
- Sprangers, M. A. G., & Schwartz, C. E. (1999). Integrating response shift into health-related quality of life research: a theoretical model. *Social Science & Medicine, 48*, 1507–1515.
- Stuart, M., & McGrew, J. H. (2009). Caregiver burden after receiving a diagnosis of an autism spectrum disorder. *Research in Autism Spectrum Disorders, 3*, 86–97.
- Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of Anxiety Disorders, 25*(1), 123–130. doi:10.1016/j.janxdis.2010.08.011.
- Vettese, L. C., Dyer, C. E., Li, W., & Wekerle, C. (2011). Does self-compassion mitigate the association between childhood maltreatment and later emotion regulation difficulties? A preliminary investigation. *International Journal of Mental Health and Addiction, 9*(5), 480–491. doi:10.1007/s11469-011-9340-7.
- Wrosch, C., Scheier, M. F., Miller, G. E., Schulz, R., & Carver, C. S. (2003). Adaptive self-regulation of unattainable goals: goal disengagement, goal reengagement, and subjective well-being. *Personality and Social Psychology Bulletin, 29*, 1494–1508.
- Zaidman-Zait, A., Mirenda, P., Zumbo, B. D., Wellington, S., Dua, V., & Kalynchuk, K. (2010). An item response theory analysis of the Parenting Stress Index-Short Form with parents of children with autism spectrum disorders. *Journal of Child Psychology and Psychiatry, 51*, 1269–1277.
- Zaidman-Zait, A., Mirenda, P., Zumbo, B. D., Georgiades, S., Szatmari, P., Bryson, S., & ... Thompson, A. (2011). Factor analysis of the Parenting Stress Index-Short Form with parents of young children with autism spectrum disorders. *Autism Research, 4*(5), 336–346.