Research in Autism Spectrum Disorders 28 (2016) 1–6

Contents lists available at ScienceDirect

Research in Autism Spectrum Disorders

journal homepage: http://ees.elsevier.com/RASD/default.asp

Behaviour problems of children with ASD and perceived stress in their caregivers: The moderating role of trait emotional intelligence?

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ARTICLE INFO

Article history:
Received 12 February 2016
Received in revised form 3 May 2016
Accepted 5 May 2016
Number of reviews completed is 1.
Available online xxx

Keywords:
ASD
Behaviour problems
Caregiving
Perceived stress
Trait emotional intelligence

ABSTRACT

Background: Psychological distress in caregivers of children with autism spectrum disorder (ASD) has been shown to vary according to characteristics of the care recipient, especially their behaviour problems. Trait emotional intelligence (TEI), which has been linked with subjective reports of distress in familial caregivers, has also been shown to predict behaviour problems in the care recipient. This study is, we believe, first to examine whether TEI might moderate the effect of child behaviour problems (CBP) on caregivers' psychological functioning.
Method: A sample of 118 parents of children with clinically verified ASD was asked to complete an online survey assessing: (a) TEI, (b) CBP and (c) perceived stress scores (PSS). The SPSS PROCESS macro (model 1) with bootstrapping was used to determine whether CBP, though its interaction with TEI, might predict caregivers' PSS.
Results: Data yielded a direct relationship between CBP and TEI, and caregivers' PSS; however, no interaction effect was observed. These data reflect the fact that caregivers of children with more behaviour problems are at greater risk for psychological distress, as are caregivers with lower TEI. The relationship between CBP and PSS, however, was not differentially affected by caregivers' TEI.
Conclusions: These findings, which implicate lower TEI and greater CBP as risk factors for psychological maladjustment in caregivers of children with ASD, might inform the design and delivery of tailored stress management interventions.

1. Introduction

Caregivers of children with a developmental disability (DD) such as ASD have been found to be at considerable risk for psychological distress. For example, in several recent studies, caregivers of children with ASD reported higher levels of negative affective symptoms such as perceived stress (Lovell, Elliot, Che Sung Liu, & Wetherell, 2014), anxiety (Ruiz-Robledillo & Moya-Albiol, 2013) and depression (Gallagher & Hannigan, 2014) compared with controls. However, individual difference variables, especially those related to caregivers' personal characteristics such as personal mastery (Cantwell, Muldoon, & Gallagher, 2014), locus of control (Lloyd & Hastings, 2009) and benefit finding (Kayfitz, Gragg, & Orr, 2010), have been shown to explain much of the variance in caregivers' subjective feelings of distress. Trait emotional intelligence (TEI), a

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http://dx.doi.org/10.1016/j.rasd.2016.05.002
1750-9467/

constellation of personality dispositions concerning one's ability to identify and understand emotions (Petrides & Furnham, 2001), has also shown to be associated with caregivers' psychological adjustment to childhood ASD (Weaving, Orgeta, Orrell, & Petrides, 2014). That caregivers' psychological well being might, at least to some extent, be influenced by their ability to identify and process emotional information has been evidenced in several other studies. For example, the correlation between alexithymia, a personality condition typified by difficulties identifying, labelling and understanding emotions, and TEI has been well documented (Parker, Taylor, & Bagby, 2001). In the context of the caregiving experience, lower levels of alexithymia have been shown to predict more adaptive psychological functioning, as evidenced by reduced feelings of anxiety (Dennison, 2001), depression and burnout (Katsifaraki & Wood, 2014). Moreover, in other chronically stressed populations such as teachers (Ju, Lan, Li, Feng, & You, 2015) and mental health nurses (Por, Barriball, Fitzpatrick, & Roberts, 2011), and in otherwise healthy individuals (Kong, Zhao, & You, 2012), TEI was inversely related to reports of psychological distress. That higher levels of TEI might be predictive of better psychological functioning has also been demonstrated in a recent meta-analysis (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007) and large scale review (Martins, Ramalho, & Morin, 2010).

Characteristics of the child with ASD, especially their behaviour problems, have been shown to predict caregivers' subjective feelings of distress (Gallagher & Whiteley, 2012; McStay, Dissanayake, Scheeren, Koot, & Begeer, 2013). Most recently, Lovell, Moss, and Wetherell (2015a) highlighted the positive relationship that exists between CBP and perceived stress scores (PSS) in caregivers of children with ASD. Moreover, in a recent qualitative study, CBP was identified as one, if not the most, influential source of feeling stressed by caregivers of children with a DD (Griffith & Hastings, 2013).

Personal characteristics of the care provider such as TEI have, along with characteristics of the care recipient, particularly their behaviour problems, been found to influence caregivers' subjective feelings of distress (Lovell et al., 2015a, 2015b; Weaving et al., 2014). However, whether the effect of CBP on caregivers' psychological functioning might be moderated by TEI has, we believe, not been examined. Several lines of evidence converge to suggest this might be the case. For example, TEI, which predicts psychological distress in caregivers of children with ASD (Weaving et al., 2014), has also been shown to be related to behaviour problems in the care recipient (Tsujino & Oyama-Higa, 2007). For example, in a recent study by Aminabadi et al. (2012), children whose parents reported higher levels of TEI displayed fewer behaviour problems during a routine dental examination. Moreover, along with other variables related to making sense of, describing and understanding emotions (e.g., alexithymia), TEI has been shown to moderate psychological responses to other stressful life events. For example, in a recent study involving professional nurses, higher levels of TEI attenuated the relationship between a range of occupational stressors and feelings of burnout (Ekermans & Brand, 2012). Moreover, in the context of the caregiving experience, other personality variables, particularly personal mastery, have been found to modify the relationship between CBP and reports of psychological distress (Mausbach et al., 2006).

Based on the evidence presented above, this study had two aims: (a) to examine the effect of TEI and CBP, and (b) their interaction, on caregivers' PSS. It was hypothesised that caregivers' PSS would be directly related to CBP and TEI, and the relationship between CBP and PSS would be moderated by TEI.

2. Methods

2.1. Participants & procedures

A sample of N = 153 caregivers of children with clinically diagnosed ASD were recruited via adverts displayed in online caregiver support groups. ASD diagnosis was based on parent report only. Participants were recruited according to strict criteria including: (a) caring for at least one child between the age of 3–19 years, living at home full time, and with a clinical diagnosis of ASD, (b) not caring for another person, e.g., partner, parent, or friend with longstanding illness, (c) not managing other chronically stressful life events, which included bereavement, divorce and caring for another person with a chronic disease, and (d) not managing a serious medical condition (e.g., cancer, cardiovascular disease). The study and all its procedures were approved by the institutional ethics review board. Consenting participants were asked to complete an electronic survey assessing: (a) demographic (e.g., age, gender) and lifestyle (e.g., smoking, alcohol, exercise) characteristics, (b) CBP, (c) TEI and (d) PSS. Participants received no recompense for taking part. Of 153 participants recruited, N = 3 were excluded for not yet receiving a clinical diagnosis with ASD, as was N = 1 who reported caring for a child >19 years of age. Participants who failed to provide any survey data (N = 10) were also removed, as were N = 22 who failed to provide any responses to one or more questionnaire. Missing responses for survey items were replaced by the mean score for the relevant scale/subscale, with the requirement that no more than 10% of items for any scale/subscale could contain missing values (Abbeduto et al., 2004). Statistical analysis was based on a final sample of N = 118.

The sample was predominately female (94.0%), partnered (82.6%), with a mean AHI above the national average (M = £59,175, SD = £74,323). Age of the care provider ranged between 23 and 63 years (M = 41.3, SD = 7.6), age of child with ASD ranged between 3 and 19 years (M = 9.8, SD = 4.4), and most parents reported caring for at least one other child (77.4%). Parents had been providing care for an average, 4.4 years (SD = 3.8). Most caregivers were non smokers (82.8%), exercised at least twice per week (61.5%), slept an average, 6.3 h per night (SD = 1.3) and consumed between 0 and 25 units of alcohol per week (M = 3.3, SD = 5.3). Sample characteristics are displayed in Table 1.