Personality and Individual Differences 99 (2016) 196–199

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid

Short Communication

Ability emotional intelligence and mental health: Social support as a mediator

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ARTICLE INFO

Article history:
Received 1 March 2016
Received in revised form 2 May 2016
Accepted 4 May 2016
Available online 20 May 2016

Keywords:
Emotional intelligence
Ability
Social support
Wellbeing
Distress
Mediation model

ABSTRACT

The mediating role of perceived social support availability is examined in the observed association between ability emotional intelligence (EI) and psychological distress. 185 Israeli undergraduate students completed measures of ability EI, social support, and distress. As predicted, path analyses demonstrated that social support was a significant mediator of the effects of EI on distress. These data suggest that the adaptive benefits of high EI should be understood from a social perspective.

1. Introduction

Broadly defined, EI represents a set of hierarchically organized core competencies for identifying, processing, and regulating emotions–both in self and others (Matthews, Zeidner, & Roberts, 2002). EI predicts a wide array of affective outcomes (Zeidner, Matthews, & Roberts, 2012), but the mediating factors in the EI-adaptive outcome nexus need clarification. Recent studies (Kong, Zhao, & You, 2012a, 2012b; Zeidner, Matthews, & Olenick-Shemesh, 2015) suggest that the benefits of being emotionally intelligent partly reside in greater perceived social support. This paper examines the mediating role of perceived social support in the association between ability-based EI and adaptive outcomes.

EI is robustly associated with lower stress and higher well-being (Zeidner et al., 2012). Research has used scales for both ability EI, conceptualized as a form of intelligence, and trait EI, which is assigned to the personality sphere (Zeidner, Matthews, & Roberts, 2009). Two meta-analyses (Martins, Ramalho, & Morin, 2010; Sánchez-Álvarez, Extremera, & Fernández-Berrocal, 2015) estimated adaptive outcomes to correlate at 0.17–0.22 with ability EI and at 0.32–0.36 with trait EI. Both forms of EI may contribute to mental health, but ability and trait EI scales do not correlate strongly, and their impacts on adaptive outcomes may reflect different mechanisms (Zeidner et al., 2009). Our focus here is on ability EI, as measured by the MSCEIT (Mayer, Salovey, & Caruso, 2012; Mayer, Salovey, Caruso, & Sitarenios, 2003).

Zeidner et al. (2015) discriminate two broad perspectives on the adaptive benefits of high EI. The *individual* perspective emphasizes the person's ability to process emotive events accurately and constructively, and to implement effective coping. It is supported by evidence linking EI to stress processes such as appraisal, coping and emotion regulation (e.g., Matthews et al., 2006). The *social perspective* emphasizes the benefits of supportive relationships with others, consistent with evidence that the MSCEIT is associated with a variety of measures of social competence and interpersonal functioning (Rivers, Brackett, Salovey, & Mayer, 2007; Zeidner, Kloda, & Matthews, 2013). The two perspectives are not exclusive – effective emotion-regulation may smooth social interaction, for example – but they do suggest different research strategies for identifying mediators of EI effects on wellbeing.

Social support is a promising candidate for a mediator variable. It is defined as the extent of the person's social integration, including various forms of functional support, including emotional and instrumental support (Taylor, 2011). Both actual and perceived supports enhance wellbeing beyond stress-buffering effects (Taylor, 2011). Social support mediates associations between trait EI and life satisfaction, together with self-esteem (Kong et al., 2012a, 2012b), but it is unknown whether support plays a similar role for ability EI.

Several studies link ability EI to higher levels of social support. The MSCEIT predicts the self-perceived quality of interpersonal relationships (Rivers et al., 2007), as well as external measures of social interaction quality provided by rating (Lopes et al., 2004) and observational

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http://dx.doi.org/10.1016/j.paid.2016.05.008
0191-8869/

data (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). Research by Di Fabio and Kenny (2012) among 309 Italian high school students found that EI, measured both as trait and ability, predicted social support, even when statistically controlling for personality factors. Those evaluating their social support to be higher may also recognize, understand, and manage emotion more effectively. Overall, studies suggest consistently that emotional competency is linked to social engagement and that social support may mediate the benefits of EI on adaptive outcomes.

In a recent study of 203 Israeli high school students, Zeidner et al. (2015) found that EI was associated with several social support scales, as well as social skills, consistent with theoretical perspectives that emphasize the importance of social engagement in adolescence. However, EI did not predict wellbeing in this study, so a mediation hypothesis could not be tested.

1.1. Goals and hypotheses

This study was conducted to test the hypothesis that the effects of ability EI on mental health are mediated by social support. We measured verbal ability and gender as potential confounds, given that the MSCEIT is reliably related to these variables (Mayer et al., 2012).

2. Method

2.1. Participants

185 undergraduate students (62% female) at a Northern Israeli university participated in this study. Participants' mean age was 23.39 (SD = 2.98).

2.2. Variables and measures

A brief, capsule description of the instruments employed in this study follows. Where necessary, the original English scales were translated into Hebrew by a bilingual psychologist and then back-translated to English by a second bilingual psychologist to assure correspondence. Measures were administered to participants in a university lab under controlled conditions.

Emotional intelligence was assessed via a Hebrew adaptation of the 141-item MSCEIT V 2.0, an ability-based EI measure (Mayer et al., 2003). It assesses four branches of EI: i.e., Emotion Identification, Assimilation of Emotions in Thought, Emotion Understanding and Emotion Management or Regulation; alpha coefficients respectively were 0.86, 0.78, 0.70, and 0.74. Total score alpha was 0.90. All tests were proportion consensus-scored with consensus weights determined from the entire sample, as recommended by Mayer et al. (2003, 2012).

Verbal ability was assessed by the 25-item *Vocabulary* subtest of the MILTA verbal ability measure (Level III - Form B; Ortar, 1966). The MILTA is modeled after the Lorge-Thorndike verbal intelligence scale (alpha = 0.83).

Social Support Availability was measured by the *Interpersonal Social Evaluation List* (ISEL: Cohen, Mermelstein, Karack, & Hoberman, 1985). It assesses four facets of support: tangible, appraisal (someone to talk to), self-esteem support and belonging support (availability of people you can do things with). Respondents rate agreement with 40 statements concerning the perceived availability of potential sources of support (e.g., “There is someone I could turn to for advice about making career plans or changing my job”; alpha = 0.76).

Mental health was assessed via two subscales from the 38-item *Mental Health Inventory* (Veit & Ware, 1983). Two separate factors were used: *Wellbeing* (e.g., “During the past month, how much of the time have your felt that the future looks hopeful and promising”; alpha = 0.95) and *Distress* (e.g., “During the past month, how often did you get rattled, upset or flustered?” alpha = 0.91).

Table 1
Intercorrelations among variables.

Scale	1	2	3	4	5
1. EI total	–				
2. Verbal ability	0.46^{**}	–			
3. Social support	$.47^{**}$	0.27^{**}	–		
4. Wellbeing	0.17^{*}	−0.11	0.37^{**}	–	
5. Distress	-0.24^{**}	−0.11	-0.48^{**}	-0.74^{**}	–
Mean	0.35	10.15	7.32	3.97	2.60
SD	0.05	5.08	0.60	0.99	0.89

Note: $n = 185$.
* $p < 0.05$.
** $p < 0.01$.

3. Results

Table 1 presents bivariate inter-correlations among study variables, along with variable means. EI and social support were significantly correlated, as hypothesized, and both variables related to lower distress. Verbal ability was significantly associated with both social support and ability EI, but not to distress.

Women scored significantly higher on ability EI than men, 398 (0.05) > 0.378 (0.05), t (184) = −2.56, d = −0.40, with gender differences accounting for 3% of the EI variance. There were no significant gender differences on any other study variables. Tests for gender differences in the relation between EI and social support (males: r = 0.52, females: r −0.41), social support and distress (males: r = −0.51, females: r −0.47), and EI and distress (males: r = −0.20, females: r −0.31), failed to find significant differences among the correlations for men and women.

Using the observed measures of EI, social support, and distress, we employed Hayes (2013) PROCESS module to test for the indirect effects of total EI scores on distress, controlling for gender and verbal ability (as covariates) in the analysis. The regression of social support on EI yielded significant effects, B = 0.46 (0.08), t = 5.39, p < 0.001, CI: 0.26 to 0.55. When distress was regressed on both social support and EI, controlling for ability gender in the model, the effects for EI were nil and nonsignificant, whereas social support was shown to have a strong effect, B = −0.47 (0.07), t = −6.34, p < 0.001, CI: −0.62 to −0.33. The significant indirect effects for EI on distress were almost entirely mediated via the effects of social support (path coefficient = −0.18 (0.05), CI: −0.30 to −0.11). The direct effect of EI (−0.06) on distress was nonsignificant. Similar results were found when testing for the indirect effects of EI on well-being as dependent variable. The indirect effects of EI on well-being (via social support) was 0.16 (SE = 0.043), with 95% bootstrap estimates ranging from 0.091 to 0.265. The direct effects of EI were nonsignificant.

3.1. Structural equation modeling

Next, we tested a linear structural equation model for the mediating effects of social support, as latent variable, on the relationship between EI and mental health, as latent variables (see Fig. 1). EI was represented by the three facets of perception, understanding, and regulation, which are the most stable MSCEIT factors (Zeidner et al., 2009). Mental health was represented by distress and well-being facets, whereas social support was assessed by two indicators, based on the four ISEL subscales–tangible and appraisal support (indicator 1) and self-esteem and belonging support (indicator 2). Analyses were conducted with Mplus Version 7.0 (Muthén & Muthén, 1998–2012).

Overall, the model showed a satisfactory fit to the data, $\chi 2$ (18) = 19.91, p = 0.28, CF = 0.99, NFI = 0.97, RMSEA = 0.046, SRMR = 0.03, AIC = 77.57. Paths between social support and both EI and well-being were statistically significant. The total standardized effect of EI on mental health (path coefficient = 0.272) was fully accounted for