

Trait Emotional Intelligence as a Moderator of the Relationship Between Psychological Distress and Satisfaction with Life

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ABSTRACT - This research examined the extent to which psychological distress is associated with satisfaction with life, and investigated whether trait emotional intelligence moderates this relationship. In a broad-based international sample of 370 adults, psychological distress predicted satisfaction with life after controlling for age, gender, country of origin, and trait emotional intelligence. Trait emotional intelligence was related to lower levels of psychological distress and greater life satisfaction. The relationship between psychological distress and life satisfaction was moderated by trait emotional intelligence. Trait emotional intelligence may act as an adaptive coping resource in that the negative association between psychological distress and life satisfaction became significantly weaker for respondents with high trait emotional intelligence.

Emotional intelligence is defined as the ability to adaptively perceive, understand, manage, and harness emotions in the self and others (Salovey & Mayer, 1990; Schutte et al., 1998). Emotional intelligence has been conceptualized in the literature both as a trait, similar to personality characteristics such as optimism and conscientiousness (Neubauer & Freudenthaler, 2005), and as an ability (Mayer, Salovey, & Caruso, 2004).

Van Rooy and Viswesvaran (2004) found that emotional intelligence is somewhat independent of other aspects of personality and cognition. Further, emotional intelligence has incremental validity in predicting academic and social life outcomes, life satisfaction, and happiness above traditional measures of academic intelligence and personality (Furnham & Petrides, 2003; Gannon & Ranzijn, 2005).

A meta-analysis by Schutte, Malouff, Thorsteinsson, Bhullar and Rooke (2007) found that across studies emotional intelligence was significantly associated with mental, physical and psychosomatic health. Emotional intelligence has been found to be associated with markers of subjective well-being such as more positive mood (Schutte, Malouff, Simunek, Hollander, & McKenley, 2002), greater life satisfaction (Austin, Saklofske, & Egan, 2005) and higher levels of psychological well-being (Brackett & Mayer, 2003). Emotional intelligence has also been associated with signs of positive mental health such as lower levels of depressed mood and anxiety, and less occupational

stress (Slaski & Cartwright, 2002; Tsaousis & Nikolaou, 2005), and positive characteristics such as prosocial behavior, empathy, parental warmth, better family and peer relations, good quality social interaction, general health, and various organizationally relevant outcome variables such as job satisfaction, organizational commitment, organizational productivity, and trust (Lopes et al., 2004).

Emotional Intelligence as a Coping Mechanism for Dealing with Negative Emotions

Negative emotions are stress-related responses to personal, situational, and/or environmental threats and challenges (Lazarus & Folkman, 1984). A state of distress can be described as the presence of negative emotions such as anxiety and stress. It can be argued that perceived stress and anxiety feed into each other, creating a feedback loop resulting in a heightened state of distress. In their interaction model of anxiety, stress and coping, Endler and Parker (1990) suggested that person variables such as stable personality traits or characteristics interact with stressor situations leading to state anxiety. For example, trait anxiety as a stable individual difference can predispose an individual to perceive certain situations stressful, and can result in that person exhibiting increases in psychological distress. Psychological distress often results in negative outcomes, such as depressed mood (e.g., Wetherell, Gatz, & Pedersen, 2001) and low positive affect (Shapiro, Roberts, & Beck, 1999). Previous research (e.g., Hamarat, Thompson, Zabrocky, Steele, & Matheny, 2001; Murrell & Norris, 1991) also found that stress and anxiety are inversely related to satisfaction with life.

Satisfaction with life is a cognitive appraisal and judgment process that can be viewed as an index of psychological adaptation to life stressors. Satisfaction with life has been a major focal point in positive psychology movement (e.g., Diener, 1984). It is a global cognitive evaluation of one's life as a whole. It has been demonstrated that judgment process of life satisfaction as a whole can be affected by salient situational factors (e.g., Schwarz & Strack, 1991), including stressful life events (Krause, 2004).

The aim of the present study was to examine the role of trait emotional intelligence in the relationship between psychological distress and life satisfaction. The present study examined the following hypotheses:

1. Greater psychological distress is associated with lower emotional intelligence and satisfaction with life, and higher emotional intelligence is associated with greater satisfaction with life.

2. Emotional intelligence moderates the relationship between psychological distress and satisfaction with life.

Method

Participants

Three hundred and seventy university students (mean age = 27.38 years; $SD = 10.01$; 71% women) from Australia and India participated in the study. Participants were recruited from a university located in a country town in New South Wales, Australia, and from three universities in medium-sized cities in northern India. The response rate was 72.98%. No incentive was provided for participation.

Measures

Trait Emotional Intelligence was measured using the 33-item Assessing Emotions Scale (AES; Schutte et al., 1998) in terms of how well respondents identify, understand, regulate, and harness emotions both in themselves and others. High scores indicate high emotional intelligence. Previous studies found the internal reliability of the scale to range from .86 to .93 (e.g., Brackett & Mayer, 2003; Schutte et al., 1998), and found a two-week test-retest reliability of .78 (Schutte et al., 1998). Cronbach's alpha for the present study was .90. Validity has been demonstrated with its scores being correlated in the expected direction with scores on measures of attention to feelings, clarity of feelings, alexithymia, mood repair, optimism and impulse control, closeness and warmth of relationship, and marital satisfaction. Also, scores on the AES significantly discriminated between therapists and both therapy clients and prisoners (Schutte et al., 1998).

Psychological Distress was assessed by two indicators: perceived stress and anxiety measured using the Anxiety and Stress subscales of a 21-item version of the Depression Anxiety Stress Scales (DASS; Lovibond & Lovibond, 2002). Shea, Tennant and Pallant (2009) reported a two-factor structure for DASS-21 with depression subscale forming one factor and a second factor forming an anxiety-stress continuum. This provides a basis to combine both anxiety and stress subscales to form a global measure of psychological distress in the present study. Both subscales consist of 7 items. Psychological distress was computed by averaging standardized anxiety and stress scores. High scores reflect greater psychological distress. The internal reliabilities for anxiety and stress subscales were .87 and .91 respectively in prior research (Antony, Bieling, Cox, Enns, & Swinson, 1998). Cronbach's alphas for anxiety and stress in the present study were .83 and .84 respectively. Antony et al. (1998) found validity evidence for the scale in that panic disorder patients scoring highest on the anxiety subscale. Further, a non-clinical population scored lower on these subscales than a clinical group.

Satisfaction with Life was measured by a 5-item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS is a measure of a person's general satisfaction with life. In previous studies the internal reliability of the scale ranged from .83 to .87 (Diener et al, 1985; Pavot, Diener, Colvin, & Sandvik, 1991). Cronbach's alpha for the present study was .78. The scale has been shown to be negatively correlated with measures of negative affect (Larsen, Diener, & Emmons, 1985), and scores are lower for psychiatric patients, prisoners, students in poor or turbulent countries, and abused women (Pavot & Diener, 1993).

Procedure

Participants were recruited in both Australia and India either through oral announcements at the start of university lectures or by postings on unit electronic websites asking for volunteers. Participants in the present study responded anonymously and returned completed questionnaires in self-addressed and postage paid envelopes. All scales were administered in English.

Results

Descriptive Statistics

Three variables, satisfaction with life, stress, and anxiety, were found to be skewed. A square root transformation was used to correct negatively skewed original satisfaction with life variable. Log transformations were used to correct positively skewed original stress and anxiety variables. Table 1 presents the means and standard deviations for the major study variables.

Table 1
Means and Standard Deviations of the Study Variables (N = 370)

Variables	M	SD	Pearson's <i>r</i>	
			2	3
1. Emotional Intelligence	126.60	14.80	-.30***	.32***
2. Psychological Distress	1.67	1.14		-.29***
3. Satisfaction with Life	2.83	0.90		

Note. *** $p < .001$

Association Between Variables

Pearson's *r* correlations examined the relationships between variables (see Table 1). Greater psychological distress was associated with lower emotional intelligence and lower satisfaction with life. Higher emotional intelligence was associated with greater satisfaction with life.

Moderation Analysis

To determine whether the association between psychological distress and satisfaction with life was moderated by trait emotional intelligence, we conducted a regression-based moderation analysis. For this analysis, age, gender, and country of origin were entered as covariates, psychological distress and the moderator (emotional intelligence) were entered as predictors in block 1, and the interaction of psychological distress with the moderator was entered in block 2. Following the recommendations of Cohen, Cohen, West, & Aiken (2003), the main effect for the continuous variable (emotional intelligence) was centered at the mean prior to computing the interaction term. Given that our hypothesis was directional, one-tailed significance tests were employed. The results of the analysis are summarized in Table 2.

The moderation effect of trait emotional intelligence on satisfaction with life was statistically significant. As predicted, the magnitude of the negative relationship between psychological distress and satisfaction with life varied substantially as a function of trait emotional intelligence. We next explored the significant interaction between psychological distress and trait emotional intelligence. Simple slope analyses indicated that as emotional intelligence increased, the negative relationship between psychological distress and satisfaction with life became weaker (for low levels of emotional intelligence, $B = -.28$, $p < .001$; for moderate levels of emotional intelligence, $B = -.20$, $p < .001$; for high levels of emotional intelligence, $B = -.12$, $p < .05$).

Table 2
Summary of Moderation Analysis Investigating the Relationship
between Psychological Distress and Satisfaction with Life

<i>Dependent variable</i>	<i>R²</i>	<i>B</i>	<i>SE</i>	<i>sr²</i>
<i>Satisfaction with Life</i>	.16*			
Predictors				
Psychological Distress (A)		-.19**	.05	.04
Emotional Intelligence (B)		.03**	<.01	.03
A x B		-.01*	<.01	.01

Note. The main effects in the table are from block 1 of the analysis and the interaction effect from block 2. *B* = unstandardized beta coefficients, *SE* = standard errors, and *sr²* = squared semi-partial correlations (amount of unique variance in the DV accounted for by a predictor). Covariates (age, gender, and country of origin) are not reported in the table. **p* < .05 ***p* < .01

Discussion

The present study examined the role of trait emotional intelligence in the relationship between psychological distress and satisfaction with life. Results showed that psychological distress accounted for about 4% of variance in satisfaction with life after statistically controlling for age, gender, country of origin, and trait emotional intelligence. Consistent with previous research (e.g., Austin, et al., 2005; Schutte, Malouff, & Bhullar, 2009; Schutte et al., 2007), in the present study higher levels of trait emotional intelligence were associated with greater satisfaction with life and lower levels of psychological distress.

A significant moderator effect was found for trait emotional intelligence. Results indicated that individuals with higher levels of emotional intelligence tend to evaluate their life satisfaction more positively, even when faced with stressful experiences. Our finding is consistent with those of Ciarrochi, Deane, and Anderson (2002) who found that trait emotional intelligence moderated the relationship between life stressors and mental health. It may be that the adaptive perception of emotion contributes to positive outcomes in various ways. For example, the better perception, understanding, and management of emotion of those with higher emotional intelligence may prevent development of maladaptive emotional states associated with mood and anxiety disorders. Research has shown that those with higher emotional intelligence tend to have more positive mood and are better able to repair mood after a negative mood induction (Schutte et al., 2002).

There are several limitations that should be considered when interpreting the present findings. First, the present study used a correlational design, which limits causal conclusions. Future research might use experimental methodologies to induce stress or decrease stress in order to identify the causal role of psychological distress in making cognitive appraisals of life as a whole. The relationship between distress and satisfaction with life could be tested with diverse populations and clinical groups. Future research might also examine possible mediating or moderating effects of other individual differences variables of interest. For example, moderating effects of the Big Five personality dimensions (McCrae & Costa, 1987), coping styles (Lazarus & Folkman, 1984), and/or sense of coherence (Antonovsky, 1996) could be examined.

Overall, our findings suggest that individuals with higher trait emotional intelligence may have the ability to overcome negative effect of psychological distress on satisfaction with life. The results of this study may be of use to researchers and practitioners in better understanding the role of adaptive emotional functioning in making cognitive appraisals of life in the face of adversity.

Author Note

This manuscript is part of a larger dataset from which several other papers with different foci than the present study have been prepared.

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