Emotional Intelligence and resilience in mental health professionals caring for patients with serious mental illness

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Abstract

Emotional Intelligence (EI) and resilience may be considered as prerequisites for mental health professionals caring for patients with serious mental illness (SMI), since they are often exposed to severe emotional stress during daily work. Accordingly, this cross-sectional study assessed both EI and resilience and their interrelationship in 61 individuals belonging to an assertive outreach team for patients suffering from SMI compared 61 control subjects without healthcare-related working conditions. EI was assessed by means of the German version of the Mayer-Salovey-Caruso-Emotional-Intelligence Test (MSCEIT), resilience was assessed using the German version of the Resilience Scale. Both groups showed an average level of EI in all categories of the MSCEIT and indicated high levels of resilience. They did not differ significantly from each other, neither in terms of EI nor resilience. Correlation analysis revealed a positive association between EI and resilience, albeit small in magnitude. Our results suggest that mental health professionals are not more resilient and therefore not more 'protected' from stressors than the general population. Though this finding warrants cautious interpretation, the positive correlation between EI and resilience suggests that EI may be a potential target for education and training in order to strengthen resilience even in healthy individuals and vice versa.

Keywords

Emotional Intelligence; resilience; mental health professionals

Introduction

Mental health professionals caring for patients with serious mental illness (SMI), e.g. schizophrenia or mood disorders are often exposed to severe emotional stress during daily work. This 'Emotional Labour', a concept introduced by Hochschild (1979), correlates with experienced stress levels in nursing professionals (Mann & Cowburn, 2005). Emotional Intelligence (EI) focuses on exactly these personality traits and abilities enabling people to

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cope with both their own feelings as well as those of others (Mayer, Salovey, Caruso, & Sitarenios, 2001).

The term 'resilience' refers to a 'successful adaptation despite risk and adversity' (Masten, 1994) and Schumacher, Leppert, Gunzelmann, Strauß, and Brähler (2005) spoke of the phenomenon that some individuals, despite marked negative circumstances and risk factors remain healthy or easily recover from adverse events, while others are particularly vulnerable to disorders and illness. Resilient individuals also experience negative affect, but these episodes are shorter in duration and do not lead to long-term psychopathological impairment (Davidson, 2000; Holtmann, Poustka, & Schmidt, 2004; Shallcross, Troy, Boland, & Mauss, 2010).

Both EI and resilience may be considered as prerequisites for professionals working with patients suffering from SMI. A considerable number of studies address EI in general healthcare workers and even more in nursing students, but investigations in mental health professionals are rare. Van Dusseldorp, van Meijel, and Derksen (2011) for instance investigated 98 Dutch nurses caring for psychiatric patients and found significantly higher EI scores in nurses compared to the general population, and a recent study in female student health professionals found higher EI levels to be associated with less perceived stress and higher levels of life satisfaction and happiness (Ruiz-Aranda, Extremera, & Pineda-Galán, 2014). This corroborates the findings of an earlier study in nursing students (Por, Barriball, Fitzpatrick, & Roberts, 2011).

To the best of our knowledge, studies assessing both EI and resilience and their interrelationship in mental health professionals haven't been conducted yet. Accordingly, the current cross-sectional study investigated these features in mental health professionals compared to a control group without healthcare-related working conditions.

Methods

All procedures contributing to this work complied with the standards of the local Ethics Committee and were conducted according to GCP standards.

Participants

The study sample included individuals belonging to an assertive outreach team for patients suffering from schizophrenia or bipolar disorder, including psychologists, social workers and psychiatric nurses, who had spent considerable time in mental health service provision. Control subjects (matched for age and sex) without healthcare-related working conditions were recruited from local shopping centres or factories and from other organizations.

A medical screening interview was used to exclude subjects with any physical or neurological illness or any condition or medication affecting neural or cerebrovascular function. Psychiatric disorders were excluded by means of the *Mini Mental Neuropsychiatric Interview* (*MINI*) (Sheehan et al., 1998) and the German version (Fydrich, Renneberg, Schmitz, & Wittchen, 1997) of the *Structured Clinical Interview for Axis-II-*

Disorders according to DSM-IV (*SCID II*) (First, Gibbon, Spitzer, Williams, & Benjamin, 1997).

Emotional Intelligence

EI was assessed by means of the German version of the Mayer-Salovey-Caruso-Emotional-Intelligence Test (MSCEIT) (Steinmayr, Schütz, Hertel, & Schröder-Abé, 2011), which provides eight task scores that measure the four branches of the EI model for adults: perceiving emotions, using emotions, understanding emotions and managing emotions. These branches cover all aspects of EI and can be assigned to the areas of emotional experiencing (perceiving + using emotions) and emotional reasoning (='strategic' EI; understanding + managing emotions). The overall reliability of the test is $r = .93$. It is both content and structurally valid and shows discriminate validity from measures of analytic intelligence and many personality constructs (Brackett & Salovey, 2006).

Resilience

Resilience was assessed using the German version (Schumacher et al., 2005) of the Resilience Scale [RS-25; Wagnild & Young, 1993], which covers five factors of resilience: purpose, perseverance, self-reliance, equanimity and existential aloneness. Items are scored on a seven-point scale ranging from 1 = strongly disagree to 7 = strongly agree, with possible scores ranging from 25 to 175. Higher values indicate higher resilience.

Neurocognitive functioning

In order to control for neurocognitive deficits as a potential source of emotional or resilience-related impairments the 'Brief Assessment of Cognition in Schizophrenia' (BACS) (Keefe et al., 2004) was conducted. In addition, verbal intelligence was measured using the German adaptation (Lehrl, Triebig, & Fischer, 1995) of the National Adult Reading Test (Nelson, 1982), the 'Mehrfachwahl-Wortschatz-Test-B' (MWT-B), a reliable and valid multiple-choice vocabulary test.

Statistical methods and data analysis

The distribution of continuous variables was checked for deviations from normality by means of the Shapiro–Wilk test. Comparison of mental health professionals and control subjects with regard to sociodemographics, EI and resilience was performed by means of the respective two-sample tests, i.e. *t*-Test, Mann–Whitney *U*-test and chi-square test, depending on the variable type. Associations between MSCEIT subscales and RS-25 were investigated by correlation analysis. As the majority of the MSCEIT subscales showed significant deviations from a normal distribution, the Spearman rank correlation coefficient was used. In addition, partial correlation analysis was applied to adjust for an effect of sociodemographic variables and neurocognition.

Results

Sample characteristics

Demographic characteristics of participants are summarized in Table 1. The two groups were comparable with respect to age, sex, BACS composite score and verbal intelligence, but differed with regard to education. However, adjustment for educational level left our findings virtually unchanged.

Emotional Intelligence and resilience

MSCEIT scores were available for all study participants and RS-25 scores for all mental health professionals and 49 control subjects. Both groups showed an average level of EI in all MSCEIT branches and were comparable in this regard as well as with respect to RS-25 total scores (Table 2). None of the sociodemographic variables showed a significant association with MSCEIT or RS-25 scores, and the same was true for cognition (BACS composite score).

Association of Emotional Intelligence with resilience

As shown in Table 3, correlation analysis revealed a positive association between the RS-25 total score and the following parts of the MSCEIT: 'using emotions', 'managing emotions', 'experiential EI' and the MSCEIT total score. Partial correlation analyses, adjusting for cognition as measured with the BACS composite score, showed that cognition was not responsible for the observed associations between the RS-25 and the MSCEIT subscores and also not for the lacking correlation with the subscale 'understanding emotions'. Similar findings were obtained when adjusting for age, sex and education.

Discussion

The primary objective of this study was to investigate EI and resilience in mental health professionals compared to a control group without healthcare-related working conditions.

Intuitively, we expected higher EI levels in the assertive outreach team members as compared to the general population. However, both assertive outreach team members and control subjects showed relatively high levels of EI and did not differ in this regard. By contrast, van Dusseldorp et al. (2011) reported on significantly higher levels of EI in mental health nurses than in the general population. These different outcomes are most probably caused by the different kinds of EI measures used in the two studies.

Our findings suggest that the daily working routine as an assertive outreach team member for patients suffering from SMI does not serve as 'training' and has no influence on ability-based EI. Similarly, the two groups were also comparable with regard to resilience as measured by the RS-25. Accordingly, mental health professionals may not be more resilient and therefore not more 'protected' from stressors than the general population. This is of special relevance, since health care professionals may consequently be at increased risk for burnout and other stress-related health issues (Mealer, Burnham, Goode, Rothbaum, & Moss, 2009).

When interpreting our data one has to consider a close professional relationship between the assertive outreach team and our clinic. Some study participants have voiced concerns about protection of privacy and providing personal data to persons, to whom they have a professional connection. This points to a possible selection bias since we did not obtain information from those team members who did not consent to study participation and clearly, less resilient or 'emotionally intelligent' caregivers may theoretically have stopped working in this field due to the burden associated with this profession.

Importantly, we found a positive association between resilience and most branches of EI, albeit – probably due to the small sample size – only small in magnitude. Based on this finding, one could suggest that training of EI may strengthen resilience. It will be critical to investigate this issue in a larger sample with a more homogeneous professional background. In addition, future studies could also examine the association between EI/resilience and effectiveness or career satisfaction. Lastly, longitudinal follow-up data are needed to determine how both facilitating resilience as well as metacognitive and social cognition training programs, which have been shown to improve affect recognition, social cognition and psychosocial functioning in patients suffering from SMI (Bersani et al., 2013; Rocha & Queirós, 2013; Sachs et al., 2012) may have a positive impact even on healthy individuals' EI and resilience, respectively, and how the associations of these features interact and change over time.

Acknowledgement

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Table 1

Demographic variables.

Variable		Mental health professionals ($N = 61$)	Control subjects ($N = 61$)	p-Value[a]
Age, mean ± SD, years		41.9 ± 9.6	39.9 ± 11.8	.316
Sex, N(%)	Male	17 (27.9)	25 (41.0)	.182
	Female	44 (72.1)	36 (59.0)	
Education, mean ± SD, years		16.4 ± 2.5	12.9 ± 3.3	<.001
BACS composite score, mean (average range: 40–60)		57.9 ± 7.7	57.3 ± 9.5	.858
MWT-B, mean ± SD, percentile		81.4 ± 14.8	71.9 ± 21.1	.063

Notes: *Abbreviations:* BACS = Brief Assessment of Cognition in Schizophrenia, MWT-B = Mehrfachwahl-Wortschatz-Test-B.

[a]Mann–Whitney *U*-Test or Fishers exact Test (for sex), respectively.

Table 2

Comparison of mental health professionals and control subjects in terms of Emotional Intelligence and resilience.

	Group				Statistics	
	Mental health professionals ($N = 61$)		Control subjects ($N = 61$, EI) ($N = 49$, RS)		Effect size	p-Value[b]
MSCEIT (Sub-)scale[a]	Mean	SD	Mean	SD	d	p
Perceiving emotions	104.9	12.8	104.8	15.9	.01	.540
Using emotions	109.1	10.7	106.0	14.1	.24	.314
Understanding emotions	103.4	12.6	99.6	15.4	.27	.133
Managing emotions	106.9	12.9	105.1	14.8	.13	.596
Experiential EI	107.7	12.0	106.2	16.1	.10	.984
Strategic EI	106.6	12.4	103.2	16.4	.24	.374
MSCEIT total score	108.9	11.8	106.1	16.9	.19	.614
RS-25 total score (range: 25–175)	150.0	14.7	151.7	11.1	−.12	.698

Abbreviations: MSCEIT = Mayer-Salovey-Caruso-Emotional-Intelligence Test, EI = Emotional Intelligence. RS-25 = Resilience Scale.

[a] MSCEIT scales were calibrated to have a mean of 100 and a standard deviation of 15 in the general population.

[b] Mann–Whitney U-Test.

Table 3

Correlation between Emotional Intelligence and resilience.

MSCEIT (Sub-)scale	RS-25 total score[a]
Perceiving emotions	.167
Using emotions	.233[*]
Understanding emotions	−.022
Managing emotions	.211[*]
Experiential EI	.199[*]
Strategic EI	.129
MSCEIT total score	.199[*]

Notes: Spearman rank correlation coefficient. *Abbreviations:* MSCEIT = Mayer-Salovey-Caruso-Emotional-Intelligence Test, EI = Emotional Intelligence, Rs-25 = Resilience Scale.

[*]
$p < .05$.

[**]
$p < .01$.

[a]Note that *p*-values were denoted only when significance was attained.