

Emotional Intelligence of Youth Accessing Residential and Day Treatment Programs: Association with Psychological and Interpersonal Difficulties

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Abstract

Background: Youth with emotional and behavioural problems often experience ongoing mental health challenges placing them at risk for less than optimal attainment of scholastic and occupational goals. Emotional intelligence (EI) has consistently been associated with good mental health (Martins et al.). The purpose for this study was to explore EI in a sample of youth with emotional and behavioural problems severe enough to warrant residential or day treatment. A second purpose was to explore the relationship of EI with psychological and interpersonal difficulties.

Methods: Cross-sectional surveys were administered to youth accessing residential and day mental health treatment programs.

Results: Thirty youth (mean age 15.30 years, SD1.64; 70% female) reported low Global EI (Total sum 123.00, SD 22.4), and interpersonal problems was strongly correlated with EI.

Conclusion: Youth accessing intensive mental health services reported low emotional intelligence and problems with interpersonal relationships. Implications for focusing research and intervention efforts on fostering interpersonal social skills that may improve youths' quality of their relationships and emotional intelligence are discussed.

Keywords: Psychological; Interpersonal difficulties; Emotional intelligence; Attention deficit hyperactivity disorder

Introduction

It has been estimated that 14 to 25% of Canadian youth experience a mental health disorder [1]: Approximately 14% of youth aged 4 to 17 years (800,000) have an emotional or behavioural disorder (EBD) within the clinical range [2], and this figure can exceed 20% when considering non-clinical cases [3]. The most common mental health disorders in children have been reported as anxiety disorders, conduct disorders, Attention Deficit Hyperactivity Disorder, and depressive disorders [1]. How well youth adapt in the community after discharge from residential care is a matter of concern.

Youth with moderate to severe disorder often have impairment in multiple domains such as scholastic, social, personal and familial domains and associated with considerable negative outcomes in these domains [4]. Preyde et al. [5-7] and Frensch et al. [8] have reported that many youth who accessed intensive mental health treatment make gains while accessing treatment, though many may still be functioning in the clinical range at discharge. While some youth made statistically significant improvements (in mood severity, self-harm behaviour, behaviour towards others, antisocial behaviour) from admission to discharge and at three years follow-up [6] other youth did not change on these clinical measures. Most youth had difficulty with academic performance, and some youth were also involved in the juvenile justice system or had encounters with law enforcement. Furthermore, many youth reported continuing challenges with mental health symptoms and interpersonal relationships. Similar challenges in various domains of living have also been reported for youth with serious EBD accessing day treatment programs in community mental health agencies [9,10]. Collectively, these results suggest that only some youth may fare well, though concern remains for many youth with EBD particularly concerns for independence and stability. Since many youth report ongoing psychological and interpersonal difficulties, exploring youth emotional competence may prove useful.

The attachment children develop with caregivers during infancy [11] has implications for their social and emotional development. The quality of experiences the child has during these early developmental phases informs the child's mental representations of the self, of others, and of emotions. These representations are important for the development of emotional competences related to one's own emotions, understanding others' emotions, and adapting to change and stress. Many youth who accessed residential or day mental health treatment centers may have experienced disruption in their living environments, and they have moderate to severe emotional and behavioral disorders, suggesting that these youth may have weak emotional competencies. Indeed some research suggests that youth with Conduct Disorder and/or ADHD have impaired facial expression recognition [12-14]. However, there is a dearth of research on the emotional competences related to processing and responding to emotional information for youth accessing residential or day mental health treatment. Skills in processing emotional information may be crucial for successful transition to adulthood and for financial independence. These skills may also be important for psychological and interpersonal functioning.

Emotional intelligence (EI) emerged in the 1990's as an important concept that was viewed as essential for personal and occupational success. EI refers to the skills for processing emotions including monitoring one's own and other people's emotions, discriminating

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between different emotions and using this emotional information to guide thinking and social interactions [15]. EI can be viewed as an innate quality or characteristic or trait of an individual within a personality framework. EI can also be viewed as a skill or ability that can be honed. For example, Petrides and Furnham [16] have conceptualized EI as a “constellation of traits and self-perceived abilities” (p425). When viewing EI as a behavioral disposition then one might expect EI to concern actual abilities. From this perspective EI would encompass similar dispositions such as empathy and assertiveness [17]. EI as self-perceived abilities may include components of personal and social intelligence. That is, EI may be thought to encompass a personality dimension as well as the ability to comprehend, process, and utilize affect-laden information obtained from monitoring other’s and one’s own emotions. There may be no consensus of the exact nature of EI [18]; it could be viewed as a capacity or competence, an individual ability or a non-cognitive skill. EI refers to awareness of one’s own and others’ emotion along with the ability to manage emotions with professional efficiency. There is growing evidence of its importance for succeeding in occupational or scholastic environments.

Perceived EI has been shown to positively correlate with perceived mental and psychological health [19-21] and has been shown to be a stable predictor of psychological adjustment in adolescents [22]. In a review of EI and its relation to psychological maladaptation in adolescents [23], EI was reported to be negatively associated with internalizing disorders including depression and anxiety, and positively associated with less substance use and better coping. EI was shown to be a protective factor for suicidal attempts and ideation [24]. That EI appears to be related to good mental and behavioral health is apparent. However, the psychosocial outcomes of youth accessing intensive mental health treatment are concerning. Therefore, attending to positive youth development [25] for youth with EBD may be especially important. One study could be located in which the EI of youth accessing residential mental health treatment was reported: Boys (but not girls) reported statistically lower EI in comparison to a normative sample and a socio-economically disadvantaged sample [26]; the authors suggested that factors related to institutionalization may account for these differences. More research would be needed to assess the EI of youth accessing intensive mental health services.

EI has been shown to correlate positively with emotional perception and peer-rated prosocial behavior and peer competence [27]; however, there was no statistically significant association between EI and intelligence or academic performance reported in this study. This finding is encouraging when considering that youth accessing residential and day treatment often struggle academically. Thus, the purpose of this study was to explore emotional intelligence in a sample of youth with EBD in residential and day treatment programs based in two mental health agencies in Ontario, Canada. A second purpose was to explore the associations of psychological symptoms including emotional difficulties and interpersonal difficulties with EI. Though this study was very exploratory in nature, it was, nevertheless, hypothesized that youth accessing these programs would score low in EI, and that EI would be associated with both interpersonal and emotional difficulties.

Methods

All adolescents accessing residential and day treatment programs at two local mental health centres were invited to complete a survey including demographic questions and standardized measures of psychological difficulties, interpersonal distress, and emotional intelligence. This report was part of a larger study on the characteristics of youth accessing residential and day treatment.

For adolescents under 16 years of age, their parent/guardian was informed that a study was in progress by agency staff by phone and asked if they would like to learn more about the study from a Research Assistant (RA). If so, staff gave the RA the parent/guardian’s contact and first name. The RA contacted the parent/guardian by phone to obtain informed consent for the youth. If the parent/guardian consented, then the RA sought assent from the youth. For youth 16 and older, staff members asked them if they want to know about the study, and if so, staff sent the youth to a meeting room to meet with the RA, or gave the RA the youth’s first name and location. The RA fully explained the study and sought informed consent. Institutional ethics clearance was provided by University of Guelph’s Research Ethics Board and the collaborating agencies.

Setting

Day treatment is designed for youth with a history of serious emotional, social and mental health/ psychiatric challenges that have interfered with their ability to function and progress within mainstream educational settings.

Residential treatment is designed for youth who have serious emotional, social, mental health/psychiatric and behavioral difficulties of a duration and intensity such that a less intrusive intervention setting is deemed insufficient to meet their needs. The program is housed in a structured therapeutic environment operating seven (7) days a week.

Measures

Youths’ self-perception of their emotional abilities was measured with the Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) by Petrides and Furnham [16,28]. It is designed to measure global trait EI or perceived trait emotional self-efficacy with 30 items rated on a 7-point scale. It has been shown to have good psychometric properties [29]. The measure is used to assess subjective emotional experience or affective aspects of personality.

The psychological symptoms or difficulties of youth were measured with the youth-self report version of the Strengths and Difficulties Questionnaire [30]. The scale was designed for youth aged 11-17 years and consists of five subscales (hyperactivity, emotional symptoms, conduct problems, peer problems and pro-social behaviour) of five items each, for a total of 25 items. Each item consists of a 3-point Likert scale (0=not true, 1=somewhat true, 2=certainly true), with scores summed to create a total score. The total difficulties score comprises the first 4 subscales, while the prosocial behaviour subscale is considered an asset (i.e., strength). Higher scores reflect increased difficulties or strengths. The SDQ has been shown to have satisfactory internal consistency (Cronbach $\alpha=0.80$), although the peer problems subscale was notably low (0.41 [30]). Criterion validity has been demonstrated with strong significant ($p<0.001$) correlations on all subscales with the Child Behaviour Checklist (CBCL; ranging from $r=0.59$ to $r=0.87$; [31]).

Youths’ perception of their interpersonal relationships was measured using the short version of the Inventory of Interpersonal Problems [32,33]. The scale consists of 32 items that require youth to rate how distressing each problem has been on a 5 point scale from 0=not at all to 4=extremely. The IIP has been shown to have strong reliability (Cronbach $\alpha=0.88$) and validity. Higher scores indicate higher interpersonal distress.

Data analysis

The Statistical Package for the Social Sciences (version 22) was

used. Demographic data are presented with descriptive statistics. T-tests were used to estimate differences between scores on youth accessing residential versus day treatment. Since there were no statistically significant differences between youth in residential versus day treatment, the sample was combined for further analyses. Step-wise multiple regression was used to explore the contributions of psychological difficulties and interpersonal difficulties to emotional intelligence. Gender was controlled and entered in the first block. The total Strengths and Difficulties were entered into the second block, and interpersonal difficulties was entered in to the third block. An r of 0.5 is considered a large correlation effect size [34].

Results

Thirty adolescents participated in the study with a mean age of 15.3 years (SD 1.64), and most were female (n=21; 70%). Characteristics of youth appear in Table 1. Cronbach's Alphas of the main constructs suggest low measurement error (EI 0.77; Interpersonal difficulties 0.94 and SDQ by subscale ranged from 0.58 to 0.69). The mean length of treatment for the residential and day programs was almost 9 months at the time of the study. For comparison, the global sum mean of EI (mean 123.00, SD 22.4) of our sample is statistically lower than a sample [16] of adolescents with disruptive behaviour recruited from a regular school system (mean 134.27, SD 18.56; t=2.01, p=0.05). That is, our sample of youth with EBD who were accessing residential or day treatment programs rated their EI as statistically lower than youth with EBD who remained in the regular or mainstream school system.

The correlations matrix appears in Table 2. There was a strong

Variable	Day Treatment		Residential		Total		t	p
	n	M(SD)	n	M(SD)	n	M(SD)		
Age (Years)	13	15.08 (1.93)	17	15.47 (1.42)	30	15.30 (1.64)	0.64	0.53
Grade	13	9.62 (1.71)	16	10.25 (1.44)	29	9.98 (1.57)	1.09	0.29
7&8	4		2		6			
9&10	6		3		9			
11&12	6		8		14			
Length of Stay (Months)	13	10.60 (7.93)	13	6.99 (8.46)	26	8.48 (8.23)	-1.12	0.27
Subjective Social Status	12	5.75 (1.42)	17	5.24 (2.28)	29	5.45 (1.96)	-0.69	0.50
Interpersonal Difficulties	13	1.51(0.56)	15	1.82(0.87)	28	1.67(0.75)	1.11	0.28
Total Difficulties	13	17.54 (6.23)	13	19.07 (5.56)	28	18.36 (5.82)	0.69	0.50
Emotional Symptoms	13	5.23 (2.83)	15	5.80 (2.08)	28	5.54 (2.43)	0.60	0.55
Conduct	13	2.31 (1.80)	15	3.23 (2.83)	28	2.82 (2.20)	1.16	0.26
Hyperactivity	13	6.08 (2.22)	15	5.33 (2.16)	28	5.68 (2.18)	-0.90	0.38
Peer Problems	13	3.92 (2.10)	15	4.67 (1.72)	28	4.32 (1.91)	1.03	0.31
Pro-social	13	7.31 (2.06)	15	7.47 (2.17)	28	7.40 (2.08)	0.20	0.84
Global EIS	13	4.23 (.64)	17	4.03 (.81)	30	4.12 (0.73)	-0.74	0.47
EIS Emotionality	13	4.29 (.80)	17	3.94 (1.05)	30	4.09 (0.95)	-0.98	0.33
EIS Self-Control	13	3.64 (1.14)	17	3.54 (1.30)	30	3.58 (1.21)	-0.23	0.82
EIS Well-being	13	4.54 (1.07)	17	4.44 (1.48)	30	4.48 (1.30)	-0.20	0.84
EIS Sociability	13	4.58 (.92)	17	4.09 (.88)	30	4.31 (.92)	-1.52	0.14

Table 1: Youth characteristics.

Measure	1	2	3	4
1. Global EIS	-	-	-	-
2. Gender	-0.294	-	-	-
3. SDQ total	-0.595**	0.136	-	-
4. IIP total	0.818**	0.377*	0.726**	-

Note: *p<0.05; **p<0.001

Table 2: summary of correlations.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.496	0.244		18.412	0.000		
	Client gender (M/F)	-0.454	0.289	-0.294	-1.571	0.128	1.000	1.000
2	(Constant)	5.675	0.384		14.795	0.000		
	Client gender (M/F)	-0.335	0.241	-0.217	-1.390	0.177	0.981	1.019
	SDQ_Totaldifficulties	-0.069	0.019	-0.565	-3.616	0.001	0.981	1.019
3	(Constant)	5.466	0.294		18.564	0.000		
	Client gender (M/F)	0.026	0.200	0.017	0.130	0.897	0.818	1.223
	SDQ_Totaldifficulties	0.000	0.021	0.003	0.017	0.987	0.451	2.218
	IIP_TotalScore	-0.786	0.178	-0.827	-4.423	0.000	0.394	2.537

a. Dependent Variable: Global EIS Mean Score

Table 3: Do psychological and interpersonal difficulties predict emotional intelligence.

correlation between interpersonal difficulties (IPP) and EI which are different concepts: one is about actual difficulties with other people and the other is about the emotional experiences in interactions. The correlation between the two independent variables (psychological and interpersonal difficulties) was 0.726 which is below 0.80. Note that 0.80 or above is considered problematic. Results indicate that gender did not contribute significantly to the model (F=2.54, p=0.130, adjusted r²=0.053). Psychological difficulties were statistically correlated with EI (F=8.34, p=0.002, adjusted r²=0.35) and the addition of interpersonal difficulties (F=16.21, p<0.001, adjusted r²=0.628) was significant. This finding suggests that the distress youth experience in interpersonally and psychologically have a strong (Cohen) relationship with EI. An examination of the beta-coefficients (Table 3) reveals that only IPP emerges as a statistically significant factor associated with EI.

Discussion

The self-rated distress with interpersonal relationships of these youth with EBD was found to be statistically correlated with EI, whereas their self-rated psychological difficulties, namely emotional difficulties and conduct disorder, were correlated with EI but not a significant predictor. These findings suggest that interpersonal distress is strongly related to EI and may have greater contributions to youth's level of EI as compared to emotional or behavioural difficulties. That is, for this sample, interpersonal difficulties rather than intrapersonal (i.e., psychological) difficulties may have relevance for EI.

Salovey and Mayer [15] view emotions as organized responses that can be adaptive. EI, defined as a subset of social intelligence, involves an awareness of emotions and an ability to monitor one's emotion and the emotions of others including the ability to discriminate between

emotions and to use this information to guide interactions and thoughts. That interpersonal difficulties were strongly associated with EI suggests that youth may need extra assistance with developing or enhancing social skills to foster socio-emotional intelligence.

Implications for Practice and Clinical Research

In particular, the socio-emotional development of these youth is often precarious [35], thus, considering their levels of EI may prove useful especially since Brackett et al. have shown that EI skills can be taught: an EI intervention with normative samples of adolescents has been shown to reduce aggression, hostility, anger and personal distress [36]. Attention to EI, thus, may also prove useful for preventive interventions [22]. EI in youth accessing residential or day programs is understudied area; in fact, no studies could be located in which the EI of these youth was reported. Since an EI intervention with normative samples showed promise [37], in the future, the application of EI intervention to this clinical population should be examined. Moreover, the findings of the present study suggest that intervention efforts may be more fruitfully targeted toward youth who view relationships as distressing and helping them to build healthy relationships. More clinical research is needed to explore the malleability of EI with appropriate intervention.

However, as this study reveals an important area for greater intervention, intervention for these youth is becoming increasingly difficult to access. Only about 20% of children and youth with mental health service needs actually access service [1]. The expanding population and greater awareness of mental health needs are placing further pressures on the mental health care delivery. A renewed focus on mental health and an infusion of resources may be needed to address interpersonal difficulties and deficits in socio-emotional processing.

Limitations

The results of this study should be interpreted with a view to its limitations. Youth were sampled from only two agencies offering residential and day programs. The sample size, though sufficient to conduct a regression analysis, is small, and reflects the fact that many youth access these programs for a long period of time (i.e., not many new youth were admitted during the study period). Furthermore, the investigators relied on self-report measures and an anonymous survey which can foster truth-telling; however, social desirability is also possible. No objective measures of emotional intelligence or competence was administered. This study was exploratory in nature and did not provide robust analysis of other factors, such as attachment patterns, that may be relevant to the development of EI.

Conclusion

Socio-emotional competence is critical for processing, understanding and managing emotional and social information in interpersonal interactions. It is also linked with academic success and occupational security. For this sample of youth with EBD, interpersonal difficulties were strongly related to their emotional intelligence, while psychological difficulties and pro-social behaviors were not as significant. The findings suggest that greater clinical attention on emotional intelligence may benefit youth as they transition to adulthood.

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