



Adolescents choosing self-harm as an emotion regulation strategy: The protective role of trait emotional intelligence

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Objectives. The present study seeks to extend the understanding of the role of dispositional factors in the aetiology of self-harm among adolescents. We hypothesized that higher trait emotional intelligence (trait EI) would be associated with a lower likelihood to harm oneself, and that this relationship would be mediated by the choice of coping strategies.

Design and Methods. Trait EI, coping styles and self-harm behaviours were assessed in 490 adolescents recruited from eight British schools.

Results. The results supported our hypothesis and showed that the relationship between trait EI and self-harm was partly mediated by the choice of coping strategies. Emotional coping was a particularly powerful mediator, suggesting that self-harm may be a way to decrease the negative emotions that are exacerbated by maladaptive emotional coping strategies, such as rumination, self-blame, and helplessness. Trait EI was correlated positively with adaptive coping styles and negatively with maladaptive coping styles, and depression.

Conclusions. These findings emphasize the potential value of incorporating coping coaching programmes in the treatment of self-harm patients.

Adolescents who deliberately self-harm have, in part, become the focus of research because of their greatly increased risk of suicide (e.g. Hawton, Zahl, & Weatherall, 2003; Owens, Horrocks, & House, 2002), and also because of the association between self-harm and a range of psychological disorders (Hurry, 2000). Deliberate self-harm (DSH, also referred to as 'self-mutilation', 'self-injury', 'auto-aggression') is defined as the deliberate, direct destruction or alteration of body tissue, without apparent or conscious suicidal intent but resulting in injury severe enough for tissue

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damage to occur (Gratz, 2003). Different types of self-harm behaviours have been described, ranging from skin cutting, skin burning, head or fist hitting, to eye enucleation, genital mutilation and even amputation of tongue or ear. Self-harm typically begins in adolescence and has usually a low level of lethality (Kahan & Pattison, 1984), although it does constitute a strong risk factor for future suicide (Hawton *et al.*, 2003; Owens *et al.*, 2002).

Because deliberate self-harm is not typically meant to lead to death, one might ponder the purpose of this behaviour. Theoretical, clinical, and empirical work alike indicate that self-harm primarily constitutes an emotion regulation strategy (e.g. Chapman, Gratz, & Brown, 2006; Gratz, 2000; Kleindienst *et al.*, 2008; Linehan, 1993). Another important function of self-harm is self-punishment. Functions like expressing distressing emotions, calling for help, reducing dissociative symptoms, testing interpersonal boundaries and preventing aggression towards others have also been reported, but to a lesser extent. Regarding its primary function as an emotion regulation strategy, a recent review of research (Klonsky, 2007) revealed that (1) acute negative affect (e.g. anger, anxiety, guilt, loneliness, self-hatred and sadness) precedes self-harm, (2) self-harm is most often performed with the intention to reduce negative affect, (3) self-harm brings temporary emotional relief and a drop in negative affect, and (4) the performance of self-harm proxies (i.e. behaviours having the core characteristics of self-harm, but not severe enough for tissue damage to occur, such as visualizing cutting or performing a painful task) in the laboratory leads to a reduction in negative affect and arousal. Gratz (2003) drew the same conclusions from her review.

The mechanisms through which self-harm operates need to be clarified, but it seems that it may function through at least three pathways: the avoidance of unwanted emotions (i.e. distract oneself from intolerable feelings), their materialization (i.e. make the emotional pain tangible) and/or their alteration (self-harm may cause the releasing of endorphins that, in turn, produce analgesia and a sense of well-being). However efficient self-harm may be in the short term to decrease negative emotions, it remains a highly maladaptive regulation strategy. Indeed, it temporarily reduces psychological distress, but at the cost of physical injury, and long-term impairment of psychological and physical welfare.

Whereas several studies have investigated the role of situational factors in the aetiology of self-harm (see Gratz, 2003 for a review), there is a striking lack of empirical studies on the role of dispositional factors, especially in non-clinical samples (see Klonsky, Oltmanns, & Turkheimer, 2003 for an exception). The present study seeks to help address this gap. Given that self-harm often functions as an emotion regulation strategy, we hypothesized that personality traits capturing individual differences in emotion regulation and coping should be particularly relevant predictors. Being able to predict such behaviours is indeed a particularly important first step in their prevention.

Trait emotional intelligence

The concept of emotional intelligence aims to capture the individual differences in the extent to which people experience, attend to, identify, understand, regulate, and utilize their emotions and those of others. While some authors have conceived EI as a set of *abilities* forming a new form of intelligence, others have emphasized that EI was conceptually (inversely) related to the personality dimensions of neuroticism and

alexithymia – among others – and should therefore be conceived as a set of affect-related *traits* (Petrides & Furnham, 2003). Accordingly, *ability EI* has been measured using IQ-like performance tests (but not so successfully), whereas *trait EI* has been evaluated using personality-like questionnaires.

Thus, trait emotional intelligence (trait EI) is a constellation of emotion-related dispositions located at the lower levels of personality hierarchies (Petrides, Pita, & Kokkinaki, 2007). Table 1 presents the constituent elements of the sampling domain of trait EI, which have been derived by means of a content analysis of salient EI models and cognate constructs (Petrides & Furnham, 2003). In trait EI models, emotion-related self-perceptions have been repeatedly shown to form four inter-related factors: *well-being* (traits pertaining to dispositional mood), *self-control* (traits pertaining to the regulation of emotions and impulses), *emotionality* (traits pertaining to the perception and expression of emotions) and *sociability* (traits pertaining to the interpersonal utilization and management of emotions; Mikolajczak, Luminet, Leroy, & Roy, 2007; Petrides, Pita, & Kokkinaki, 2007).

Table 1. The adult sampling domain of trait emotional intelligence

Facets	High scorers perceive themselves as. . .
Adaptability	. . . flexible and willing to adapt to new conditions
Assertiveness	. . . forthright, frank, and willing to stand up for their rights
Emotion perception (self and others)	. . . clear about their own and other people's feelings
Emotion expression	. . . capable of communicating their feelings to others
Emotion management (others)	. . . capable of influencing other people's feelings
Emotion regulation	. . . capable of controlling their emotions
Impulsiveness (low)	. . . reflective and less likely to give in to their urges
Relationships	. . . capable of maintaining fulfilling personal relationships
Self-esteem	. . . successful and self-confident
Self-motivation	. . . driven and unlikely to give up in the face of adversity
Social awareness	. . . accomplished networkers with superior social skills
Stress management	. . . capable of withstanding pressure and regulating stress
Trait empathy	. . . capable of taking someone else's perspective
Trait happiness	. . . cheerful and satisfied with their lives
Trait optimism	. . . confident and likely to 'look on the bright side' of life

Trait EI appears to have significant predictive and explanatory utility in many different contexts, such as the prediction of work performance (see Van Rooy & Viswesvaran, 2004 for a meta-analysis), marital satisfaction (Schutte *et al.*, 1998), mental health (see Schutte *et al.*, 2007 for a meta-analysis), and the quality of social relationships (Mikolajczak, Luminet, *et al.*, 2007), to name but a few. The incremental validity of trait EI *vis-à-vis* the Giant Three, the Big Five, and other personality variables has been demonstrated in many independent studies (e.g. Mikolajczak, Menil, & Luminet, 2007; Mikolajczak, Roy, Luminet, Fillée, & de Timary, 2007; Petrides, Frederickson, & Furnham, 2004; Saklofske, Austin, & Minski, 2003; Van der Zee & Wabeke, 2004).

A recent review and meta-analysis of research (Mikolajczak & Gross, 2008) discussed how the construct of trait EI is particularly useful in capturing individual differences in emotion regulation. High trait EI individuals regulate their emotions in a flexible

manner (i.e. they can recognize when emotions are informative and when they have to be regulated) and in a way that is consistent with their goals as well as adaptive (i.e. maximizing long-term survival and welfare). This review also showed that trait EI is positively linked to functional coping strategies (e.g. problem-solving, social support seeking, and reappraising) and negatively linked to dysfunctional strategies (e.g. inhibition of emotional expression and substance abuse).

Based on the foregoing, we hypothesized that trait EI would be associated with a lower likelihood to resort to self-harm. We further hypothesized that this association would be mediated by the choice of coping strategies. That is, the less emotionally intelligent people would exhibit a higher tendency to use maladaptive coping strategies (e.g. avoidance, rumination, self-blame), which would increase the likelihood that they use self-harm as an attempt to cope with their ill-regulated emotions.

Method

Participants and procedure

Four hundred and ninety British high school students (57.3% girls, 39.4% boys and 3.3% unreported) participated in the study. Ages ranged from 16 to 19, with the exception of one 20-year old student. The mean age was 16.65 years ($SD = 0.75$ years). The age of the sample is adequate to observe self-harm behaviours because most SH behaviours begins before age 16 (Ross & Heath, 2002). These participants were recruited through contact with a number of schools and colleges based in London. Eight schools agreed to take part. The ethnic background of the participants was 40.4% White, 6.8% Asian and 21% Black, reflecting the proportion that is found in the general population. The participants completed measures of demographics, trait EI, depression, coping, and self-harm. The study adheres to the British Psychological Society guidelines on research with adolescents and was approved by the ethics committee at the Institute of Education, University of London.

Measures

Trait Emotional Intelligence Questionnaire - Adolescent Short Form (TEIQue-ASF; Petrides, Sangareau, Furnham, & Frederickson, 2006) is a simplified version, in terms of wording and syntactic complexity, of the adult short form of the TEIQue.¹ It consists of 30 items rated on a 7-point likert scale (1 = strongly disagree to 7 = strongly agree). Each of the 15 subscales of the long version of the TEIQue (see Table 1) is represented by two items in the short version. The short form does not yield subscale scores but provides a global score, which correlates .95 with the global score of the long version (Petrides, unpublished data). The TEIQue-LF has been shown to have excellent psychometrical properties (see e.g. Mikolajczak *et al.*, 2007), high predictive and incremental validity, even regarding biological criteria (see for e.g. Mikolajczak, Roy *et al.*, 2007). The internal consistency of the TEIQue-ASF was .83 in the present sample.

The Coping Styles Questionnaire (Roger, Jarvis, & Najarian, 1993) consists of 60 items assessing how one typically reacts to stress. It measures four factorially distinct coping strategies, two of which are adaptive, viz., 'rational' coping (e.g. 'Take action

¹ All forms, versions, and translations of the TEIQue are available from the second author, free of charge, for research purposes.

to change things', 'Try not to let my heart rule my head') and 'detached' coping (e.g. 'Just take nothing personally' 'Decide it's useless to get upset and just get on with things') and two maladaptive, viz., 'emotional' coping (e.g. 'Criticize or blame myself', 'Keep thinking it over in the hope that it will go away') and 'avoidant' coping (e.g. 'Daydream about times in the past when things were better', 'Feel that time will sort things out'). Participants responded on a four-point Likert scale, ranging from 'never' to 'always'. The internal consistencies of the 'rational', 'detached', 'emotional' and 'avoidant' coping styles were .78, .78, .77, and .64. Composite scores for adaptive and maladaptive coping were computed by averaging rational and detached coping on the one hand, and emotional and avoidant coping on the other hand (see Roger *et al.*, 1993). The reliabilities of these adaptive and maladaptive coping scores were .87 and .78.

Depression was assessed with the Beck depression inventory (BDI II; Beck, Steer, & Brown, 1996). The BDI II is a 21-item instrument assessing the intensity of depression experienced by participants within the two weeks prior to the assessment. Items are responded to on a four-point scale ranging from 0 to 3. The maximum possible score is 63; A total score of 0–13 indicates no or minimal depression, 14–19 mild depression, 20–28 moderate depression and 29–63 severe depression. The internal consistency of the scale was 0.94 in the present sample.

Self-harm was assessed via the Deliberate Self-Harm Questionnaire. Respondents were asked whether they had ever tried to hurt themselves quite seriously and were prompted with the following examples: 'taken too many pills', 'cut yourself' or 'punched a wall hard'. If they reported DSH they were classified as 'self-harmers' and were coded as 1 by opposition to 0 for non self-harmers. This status (self-harmers or not) was then used in subsequent analysis. Self-harmers were also asked to describe what method they had used on the most recent occasion, their reasons for engaging in DSH behaviours, whether they did so with the intention to die, and whether the episode resulted in hospitalization.

Statistical procedures

First, descriptive statistics were computed to determine the prevalence and nature of self-harm in this sample. Second, the relationships between trait EI, coping styles, depression and self-harm were analyzed through Pearson correlations. Note that the correlations involving coping were performed in three different ways: (a) using the four subscales separately, (b) using the adaptive and maladaptive coping composite scores, and (c) using an adaptive/maladaptive ratio, indicating the relative use of adaptive versus maladaptive strategies. Third, mediation analyses were carried out to statistically determine whether coping strategies mediated the relationship between trait EI and self-harm.

According to Baron and Kenny (1986), mediation is said to occur when (1) the independent variable (IV) significantly influences the mediator, (2) the IV significantly influences the dependent variable (DV) in the absence of the mediator, (3) the mediator has a unique effect on the DV and (4) the effect of the IV on the DV shrinks upon the addition of the mediator to the model. Full mediation is said to occur when this latter effect drops to zero, partial mediation is said to occur when this effect diminishes, but remains significant. In the case of partial mediation, a Sobel test (1982) was performed to ensure that the indirect effect of the IV on the DV via the mediator significantly differed from zero.

Results

Prevalence, nature and purpose of self-harm

Among the 490 adolescents, 132 (27%) reported having deliberately harmed themselves, 355 (72%) reported having never tried to do so, and 3 (less than 1%) did not answer the question. There were no gender differences in these data ($\chi^2 = 0.001$, $p = .969$). Amongst the young people having harmed themselves, 54% hit themselves, 24% cut themselves, 3% took an overdose of recreational drugs, 11% took an overdose of tablets and 8% used other means. The majority of self-harm episodes (54%) occurred during the past three months and less than 10% led to hospitalization.

Sixty-five percent of self-harmers suffered from mild to severe depression (BDI scores between 14 and 63) and most of them (78.5%) harmed themselves with no intention to die. As expected, the primary reason for self-harming was to regulate one's emotions (80% of cases). The use of self-harm as a means of revealing one's suffering to others was acknowledged by 12% of self-harmers.

Trait EI and self-harm

The correlation between trait EI and self-harm in the present sample was $-.31$, $p < .001$ ($r = -.25$, $p < .001$ if we consider only the adolescents who harmed themselves with no intention to die). Accordingly, and as shown in Table 2, the mean trait EI score of those having deliberately harmed themselves (4.13) was significantly lower than the mean of their peers (4.62). It is noteworthy that, among self-harmers, the mean trait EI of those who did so with the intention to die (=suicide attempters) (3.77) was significant lower than that of those who harm themselves with no such intention (4.20) (see Table 2).

A probit regression analysis indicated that the likelihood that an adolescent deliberately harms him/herself is 75% if their TEIQue score is below 2.47, is 50% if his/her TEIQue score is above 3.47 and drops to 25% if their TEIQue score is above 4.50.

Note that the relationship between trait EI and self-harm holds when depression is controlled for. Further analyses revealed that depression mediates the relationship between trait EI and self-harm.

Coping styles and self-harm

The results indicated that self-harm was not related to the use of adaptive strategies but was positively related to the use of maladaptive strategies (see Table 3). As shown in Table 2, the analysis of the coping ratio as a function of self-harm indicated that people deliberately harming themselves are characterized by a propensity to use maladaptive, rather than adaptive strategies. The opposite is true of people who do not self-harm.

Maladaptive coping styles as mediators between trait EI and self-harm

Simple mediation analyses (see Figure 1a–d) indicated that the propensity to choose maladaptive coping strategies (emotional and avoidant) mediated the relationship between trait EI and self-harm. Nevertheless, greater coefficients were obtained for emotional than for avoidant coping, suggesting that the former may be a more powerful mediator. The multiple mediation analysis (see Figure 2) corroborated this finding and also revealed that avoidant coping was no longer a mediator in the presence of

Table 2. Mean differences between self-harmers and controls

	Mean (SD) among adolescents not harming themselves (N = 343)	Mean (SD) among adolescents harming themselves (N = 128)	t	Mean (SD) among adolescents who harmed themselves with no intention to die (N = 102)	Mean (SD) among suicide attempters ^a (N = 22)	t
Trait EI	4.62 (0.63)	4.13 (0.72)	7.18 ^{****}	4.20 (0.65)	3.77 (0.90)	2.68 ^{**}
Depression	9.41 (9.34)	20.98 (13.45)	-8.96 ^{****}	19.44 (12.19)	28.81 (16.87)	-2.43 [*]
A/M ratio (baseline)	1.11 (0.28)	0.92 (0.26)	6.60 ^{****}	0.95 (0.25)	0.82 (0.27)	2.17 [*]

Note. When the A/M ratio is greater than 1, it indicates a propensity to use adaptive, rather than maladaptive, coping strategies. When the A/M ratio is less than 1, it indicates a propensity to use maladaptive, rather than adaptive, coping strategies.

^aSuicide attempters = Adolescents who harmed themselves with the intention to die. ^{****} $p \leq .001$; ^{**} $p \leq .01$; ^{*} $p \leq .05$.

Table 3. Intercorrelation matrix for the variables in the study within the whole sample (correlations excluding suicide attempters in brackets)

	1	2	3	4	5	6	7	8	9	10
1. TEIQue	—									
2. Self-harm	-.31 ^{***} [-.25 ^{***}]	—								
3. Depression	-.48 ^{***} [-.44 ^{***}]	.43 ^{***} [.38 ^{***}]	—							
4. Rational coping	.46 ^{***} [.42 ^{***}]	-.13 ^{***} [-.07 ^{***}]	-.21 ^{***} [-.18 ^{***}]	—						
5. Detached coping	.37 ^{***} [.33 ^{***}]	-.09 ^{***} [-.06 ^{***}]	-.21 ^{***} [-.18 ^{***}]	.70 ^{***} [.69 ^{***}]	—					
6. Emotional coping	-.53 ^{***} [-.49 ^{***}]	.40 ^{***} [.36 ^{***}]	.62 ^{***} [.58 ^{***}]	-.22 ^{***} [-.20 ^{***}]	-.26 ^{***} [-.24 ^{***}]	—				
7. Avoidant coping	-.26 ^{***} [-.24 ^{***}]	.20 ^{***} [.18 ^{***}]	.28 ^{***} [.27 ^{***}]	.17 ^{***} [.20 ^{***}]	.19 ^{***} [.22 ^{***}]	.51 ^{***} [.51 ^{***}]	—			
8. Adaptive coping	.42 ^{***} [.39 ^{***}]	-.11 ^{***} [-.07 ^{***}]	-.21 ^{***} [-.17 ^{***}]	.93 ^{***} [.93 ^{***}]	.90 ^{***} [.90 ^{***}]	-.23 ^{***} [-.21 ^{***}]	.20 ^{***} [.22 ^{***}]	—		
9. Maladaptive coping	-.45 ^{***} [-.42 ^{***}]	.33 ^{***} [.30 ^{***}]	.50 ^{***} [.47 ^{***}]	-.06 ^{***} [-.02 ^{***}]	-.07 ^{***} [-.03 ^{***}]	.92 ^{***} [.91 ^{***}]	.82 ^{***} [.83 ^{***}]	-.05 ^{***} [-.01 ^{***}]	—	
10. A/M Ratio	.58 ^{***} [.55 ^{***}]	-.29 ^{***} [-.25 ^{***}]	-.45 ^{***} [-.43 ^{***}]	.65 ^{***} [.64 ^{***}]	-.62 ^{***} [.61 ^{***}]	-.76 ^{***} [-.76 ^{***}]	-.45 ^{***} [-.45 ^{***}]	.69 ^{***} [.68 ^{***}]	-.72 ^{***} [-.71 ^{***}]	—

Note. Adaptive coping is a composite variable corresponding to the mean of rational and detached coping. Maladaptive coping is a composite variable corresponding to the mean of emotional and avoidant coping (see Roger et al., 1993). The A/M ratio indicates the relative utilization of adaptive versus maladaptive coping strategies. ^{***} $p \leq .001$; ^{**} $p \leq .01$; ^{*} $p \leq .05$.

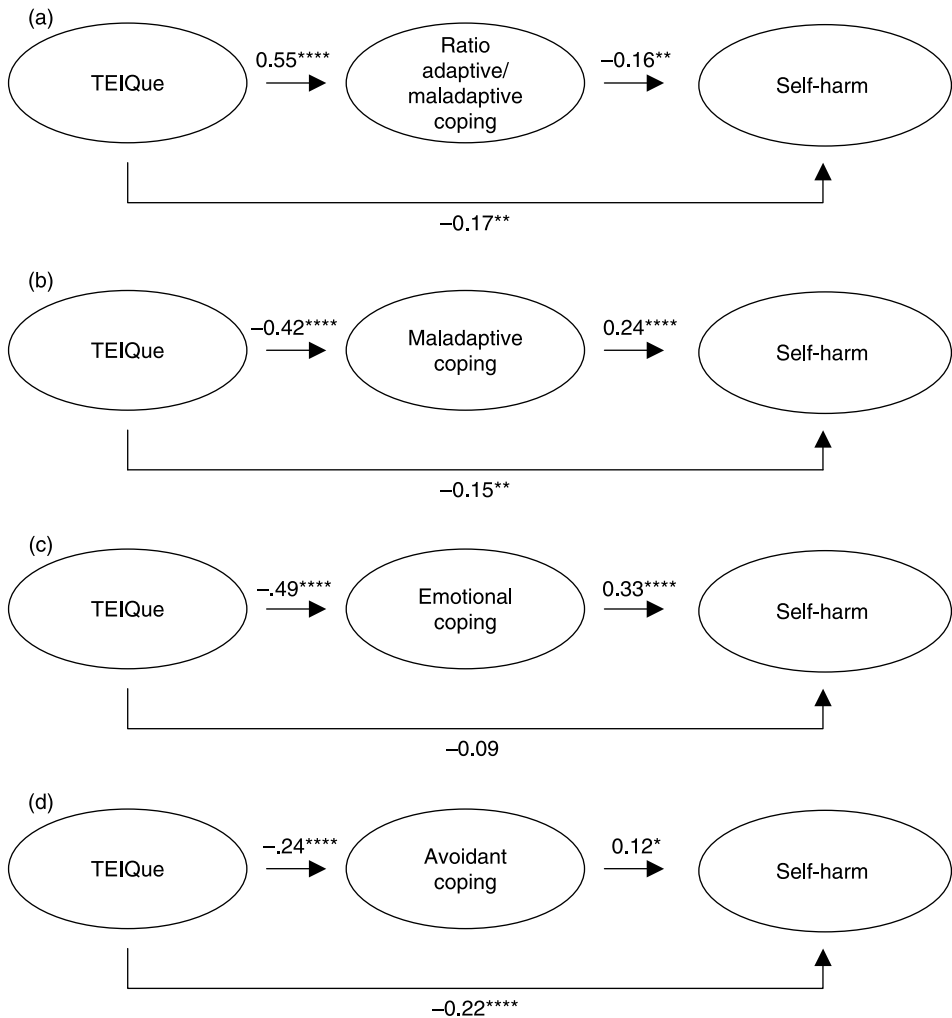


Figure 1. Simple mediating testing the role of coping styles in the relationship between trait EI and self-harm (excluding suicide attempters). (a) Mediating role of the adaptive/maladaptive coping ratio in the use of self-harm. (b) Mediating role of maladaptive coping in the use of self-harm. (c) Mediating role of emotional coping in the use of self-harm. (d) Mediating role of avoidant coping in the use of self-harm. Note. The mediation coefficients are *standardized* mediation coefficients. All four mediations are partial mediations. Sobel's statistics for (a), (b), (c) and (d) are $z = -0.002$, $p \leq .01$; $z = -0.002$, $p \leq .0001$; $z = -0.004$, $p \leq .0001$; $z = -0.0006$, $p \leq .05$, respectively. **** $p \leq .0001$; *** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$.

emotional coping (suggesting that its mediation effect is attributable to the part of its variance that overlaps with emotional coping).

Discussion

Deliberate self-harm is more common than usually thought. Research on self-harm prevalence among adolescents point to rates varying between twelve to forty percent

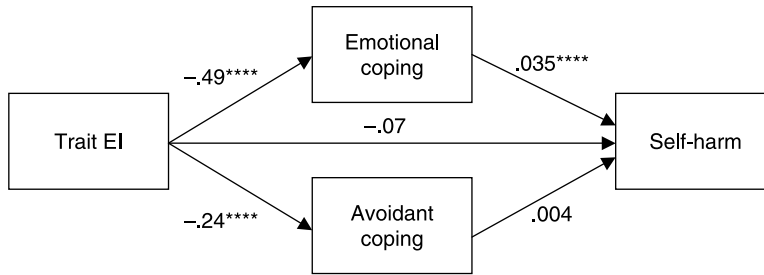


Figure 2. Multiple mediation testing the role of coping styles in the relationship between trait EI and self-harm (excluding suicide attempters). Note. The mediation coefficients are *standardized* mediation coefficients. Adj R^2 of the model = 0.14, $p \leq .0001$, **** $p \leq .0001$.

(Gratz, 2001; Heath, Toste, Nedecheva, & Charlebois, 2008; Lloyd-Richardson, Perrine, Dierker, & Kelley, 2007; Withlock, Eckenrode, & Silverman, 2006). In our sample, twenty-seven percent of adolescents reported having already deliberately harmed themselves. More alarmingly perhaps, twenty-one percent of them did so with intent to die. These numbers need to be placed in their context - adolescence - which is a particularly difficult period of life (Marcelli & Braconnier, 2004). Nevertheless, given that self-harm constitutes a strong risk factor for suicide (Hawton *et al.*, 2003), the prevalence of self-harm in our sample stresses the necessity of further research in this area. It is essential to achieve a better understanding of the antecedents of this phenomenon in order to be able to treat it or even prevent it.

Past research has brought to light the regulatory function of self-harm. Our results fully support this view in that eighty percent of the young people who deliberately harmed themselves reported doing so in an attempt to regulate unpleasant emotions. It is striking, however, that while it is natural to experience negative emotions, not everyone chooses to self-harm in order to regulate them. According to Chapman *et al.* (2006, p.384) 'individuals who engage in deliberate self-harm have strong experiential avoidance repertoires or response tendencies, possibly stemming from [...] a deficit in emotional regulation skills, and/or difficulties implementing alternative coping strategies when emotionally aroused'. Our data provide support for this hypothesis by showing that high trait EI scores, which are indicative of high emotion regulation efficacy (Mikolajczak & Gross, 2007), are linked to a lower likelihood of self-harm.

The results suggested that part of the association between trait EI effect and self-harm was mediated by the choice of coping strategies. Chapman *et al.* (2006) hypothesized that self-harm is partly caused by a difficulty in adopting adaptive coping strategies. Our study corroborates this hypothesis, in that the maladaptive-to-adaptive coping styles ratio was greater for self-harmers than for controls. Although both emotional and avoidant coping mediated the influence of trait EI on self-harm, the multiple mediation analysis revealed that the latter is no longer a mediator in the presence of the former. This suggests that self-harm may be more closely related to an ultimately dysfunctional attempt to deal with negative emotions, rather than with trying to avoid them altogether. In turn, the mediation through emotional coping indicates that self-harm may be a desperate attempt to down-regulate the negative feelings that are exacerbated by ineffective emotional coping strategies, such as rumination, self-blame, and helplessness.

The present study contributes to both the self-harm and the trait EI literature. Whereas several studies have documented the role of *situational* risk factors in self-harm (e.g. childhood sexual or physical abuse, neglect, childhood separation and loss; see Gratz, 2003 for review), the present study documents the role of *personality* variables, which have been underemphasized in this literature. Regarding the trait EI literature, the study provides additional empirical support for the importance of trait EI in emotion regulation (see Mikolajczak & Gross, 2008 for a review). Furthermore, it reinforces the point that trait EI does not only predict subjective criteria (e.g. life satisfaction, somatic complaints) but also objective real-life outcomes (for task performance see Austin, 2004; Van Rooy & Viswesvaran, 2004; for health, see Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007; for peer relations, see Mavroveli, Petrides, Rieffe, & Bakker, 2007; and for managerial competences, see Van der Zee & Wabeke, 2004).

The present findings also bear practical implications, both for clinical practice (treatment) and for education (prevention). Should these findings be replicated, they plead in favour of incorporating coping and emotional coaching programs in the treatment of self-harm patients. Indeed, increasing the use of alternative, adaptive coping skills could lead to the reversal of the A/M ratio, resulting in a decrease – and, ideally, a cessation – of self-harm. Along with others, the present results also suggest that it could be useful to introduce in schools intervention programs targeting children's emotional competencies.

Despite its contribution, several limitations have to be acknowledged. First, we did not control for the frequency of negative life-events. As suggested by an anonymous reviewer, self-harmers may be confronted to more negative life-events, causing them more frequent and intense emotions in the first place, which would lead them to try more extreme methods to cope with these emotions. Second, the current study does not allow differentiating between adolescents who will harm themselves only once and those who will use this strategy over several years. Future studies would greatly benefit from surveying an older sample in order to distinguish between the single and the repetitive resort to self-harm. Third, we did not measure any situational risk factor for self-harm such as childhood separation and loss, child neglect and child abuse. This would have allowed us to investigate in greater details the moderating role of trait EI. However interesting, obvious ethical considerations prevented us from including such questions. Fourth, the transversal nature of the present design does not allow drawing firm conclusions in terms of causality. Mediation analyses must therefore be considered with caution. Prospective studies with trait EI measured before the first self-harm episode are necessary to establish causality, but these are difficult to conduct. Intervention studies might help to disentangle causality links. For instance, a 'trait EI' group could be taught emotional skills while a 'self-harm' group might be taught self-harm substitution strategies (like those suggested by McKay, Wood, & Brantley, 2007, p. 13: e.g. write on yourself with a red felt-tip marker instead of cutting yourself, . . .). A reduction of self-harm behaviours in the first group with no modification in trait EI in the second would support the direction of causality that we have suggested.

Conclusion

The present study aimed at extending the understanding of the role of dispositional factors in the aetiology of self-harm. We hypothesized, and found, that adolescents with higher trait emotional intelligence (trait EI) were less inclined to deliberately harm

themselves. This relationship was mediated by the choice of coping strategies. These findings emphasize the potential value of incorporating coping coaching programmes in the treatment of self-harm patients.

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