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Core Beliefs and Impulsivity Among a General Psychiatric Population: A Mediating Role for Dissociation?

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Abstract. Self-harm and externally-directed impulsive behaviours are relatively common in psychiatric populations. Different explanations have been advanced for the presence of these behaviours, including the suggestion that they are driven by unconditional beliefs (schema-level cognitions) and that they are related to dissociation (a reduction in processing of intolerable cognitions and affect). This brief study begins to test a model based on the hypothesis that unconditional core beliefs are associated with the use of impulsive behaviours, and that dissociation is a key factor that mediates the relationship. An unselected group of 50 psychiatric inpatients completed standardized self-report measures of core beliefs, dissociation and impulsive behaviours. For female patients only, the results of mediational multiple analysis were compatible with a model where the relationship between unconditional abandonment beliefs and self-harming behaviours is perfectly mediated by dissociation. The strengths, limitations and directions for further research are discussed.

Keywords: Core beliefs, dissociation, impulsive behaviours.

Introduction

The cognitive and emotional roots of impulsive behaviours are not well understood, thus limiting our therapeutic ability to reduce their frequency and severity. Cognitive theorists (e.g. Young, 1999) propose that core beliefs (unconditional schema-level representations) may have a strong influence upon impulsive behaviours. However, it is not clear how to explain this association. It has been suggested that impulsive behaviours serve as part of a defensive process, reducing awareness of distressing situations (e.g. Baumeister, Heatherton and Tice, 1994). Further to this, dissociation (an intrapsychic method of cognitive avoidance) has been shown to be relatively strong among individuals with impulsive behaviours (e.g. Carlson and Putman, 1993). While dissociation might obviate the need for impulsive "blocking" behaviours among the general population, the more extreme levels of dissociation among

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clinical groups are likely to result in the behavioural disinhibition that manifest as impulsive behaviours (Baumeister et al., 1994). Therefore, it can be hypothesized that dissociation will mediate the relationship between distressing cognitions and impulsive behaviours. This pilot study of psychiatric patients will examine whether dissociation might act as a mediator in the hypothesized relationship between core beliefs and impulsive behaviours.

Method

Participants

The participants were 50 psychiatric inpatients – 16 men (mean age = 33.8 years; $SD = 7.87$) and 34 women (mean age = 37.2 years; $SD = 9.10$). They had a range of ICD-10 diagnoses (World Health Organization, 1992), given by their responsible psychiatrists. The principal diagnoses were: disorders due to psychoactive substance use ($N = 8$); schizophrenia, schizotypal and delusional disorders ($N = 11$); mood disorders ($N = 24$); neurotic, stress-related and somatoform disorders ($N = 7$); and disorders of adult personality and behaviour ($N = 7$). Some patients had comorbid diagnoses.

Measures and procedure

Participants completed three self-report measures, each of which had been validated psychometrically and clinically. They were: the *Young Schema Questionnaire-Short form* (YSQ-S; Young, 1998), which addresses 15 unconditional core beliefs; the *Dissociative Experiences Scale* (DES-II; Carlson and Putnam, 1993), which addresses dissociation; and the *Impulsive Behaviours Scale-Revised* (IBS-R; Peñas Lledó, Vaz, Ramos and Waller, 2002), which measures the degree to which the individual engages in 25 different impulsive behaviours, divided into self-harming and externally-directed impulsive behaviours. All measures were completed during the last week of admission prior to discharge to reduce the danger that scores would be elevated by immediate psychiatric distress. A researcher was available to supervise and assist the patient where necessary.

Results

Table 1 shows the mean scores of the male and female participants on all measures. The YSQ-S and DES-II scores are comparable with those for other clinical groups (e.g. Carlson and Putnam, 1993; Shah and Waller, 2000). The female patients had higher scores than males for core beliefs on all but one of the YSQ scales, while other scores were more mixed. However, adopting the alpha level of 1% (to reduce Type I errors) there were significant differences on only three scales. Women had stronger YSQ Abandonment and Dependence/incompetent beliefs, while men reported higher levels of IBS externally-directed impulsive behaviours.

Prior to determining mediators of the link between core beliefs and impulsive behaviours, it is necessary to determine which core beliefs and which impulsive behaviours are associated (Baron and Kenny, 1986). Therefore, correlations (one-tailed Pearson's r) were used out to determine which YSQ-S scales were associated with which IBS scales. There were no reliable associations with externally-directed behaviours, but self-harming behaviours were significantly and positively associated with YSQ-S abandonment beliefs among the females ($r = .44$, $p < .005$). Therefore, the next step was to determine the potential role of dissociation as a mediator between abandonment beliefs and self-harming behaviours among the females only.

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Table 1. Levels of core beliefs (YSQ-S scales), dissociation (DES-II scale) and impulsive behaviours (IBS scales) among the male and female clinical participants

	Males ($N = 16$)		Females ($N = 34$)		*t*-test	
	Mean	(*SD*)	Mean	(*SD*)	*t*	*p*
YSQ-S scales						
Emotional deprivation	2.90	(1.10)	3.54	(1.44)	1.71	NS
Abandonment	2.78	(1.49)	4.22	(1.55)	3.26	.002
Mistrust/abuse	2.81	(1.20)	3.78	(1.48)	2.29	NS
Social isolation	2.98	(1.47)	3.79	(1.82)	1.57	NS
Defectiveness/shame	2.73	(1.40)	3.39	(1.86)	1.28	NS
Failure to achieve	2.55	(1.52)	3.41	(1.78)	1.67	NS
Dependence/incompetence	2.18	(1.24)	3.42	(1.35)	3.10	.003
Vulnerability to harm	2.54	(1.30)	2.88	(1.28)	0.89	NS
Enmeshment	2.06	(1.27)	2.56	(1.49)	1.14	NS
Subjugation	2.80	(1.44)	3.43	(1.54)	1.37	NS
Self-sacrifice	3.33	(1.53)	4.02	(1.03)	1.65	NS
Emotional inhibition	3.18	(1.51)	3.45	(1.47)	0.60	NS
Unrelenting standards	3.96	(1.42)	4.42	(1.39)	1.30	NS
Entitlement	2.79	(1.05)	2.90	(1.40)	0.35	NS
Insufficient self-control	3.59	(1.21)	3.35	(1.56)	0.56	NS
DES-II dissociation	13.1	(10.5)	22.4	(15.2)	2.14	NS
IBS total	2.41	(0.73)	2.12	(0.75)	1.32	NS
IBS Self-harm	2.23	(0.79)	2.47	(0.93)	0.87	NS
IBS Externally-directed	2.56	(0.84)	1.85	(0.79)	2.92	.005

Bivariate associations were calculated first (Baron and Kenny, 1986). The first regression analysis showed that the YSQ-S Abandonment scale predicted 16.8% (adjusted R^2) of the variance in IBS impulsive self-harm ($F = 7.66$; $p < .01$). Higher levels of abandonment fears were associated with greater levels of self-harming behaviours. In the second analysis, the YSQ Abandonment belief significantly predicted DES-II dissociation scores ($F = 9.21$; $p < .005$; variance explained = 19.9%). In the third step, DES-II dissociation was significantly and positively associated with self-harming behaviour ($F = 10.23$; $p < .003$; variance explained = 21.9%). In the final part of this analysis, the critical test is whether removing the impact of dissociation upon self-harming behaviours affects the relationship between abandonment beliefs and self-harming behaviours. A multiple regression analysis was used, in which the effect of the hypothesized mediator (DES-II dissociation) upon the dependent variable (IBS Self-harm) was removed before the effect of the independent variable (YSQ-S Abandonment) was examined. The Sobel test (Goodman I version) is used to determine whether the mediation effect differs from zero (Baron and Kenny, 1986). There was a significant mediation effect (Goodman I statistic = 2.15; $p < .04$), and abandonment beliefs no longer had a significant relationship with self-harm when that mediating effect was taken into account (F change = 2.43, NS; change in explained variance = 5.5%). Although these findings are not evidence of causality, it can be concluded that these findings are compatible with a model where the influence of abandonment beliefs upon self-harm in a female psychiatric population is perfectly mediated by dissociation.

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Discussion

This pilot study of an unselected group of psychiatric patients has tested the potential role of dissociation in the relationship between unconditional core beliefs and impulsivity. The findings are compatible with such a model, but only among female patients, where dissociation appears to be a perfect mediator of the link between abandonment of core beliefs and self-harm. These findings are preliminary, and require substantial further testing in more specific clinical groups. In particular, a prospective design would provide more conclusive evidence of causality. It would be valuable to use this approach to determine whether dissociation is a precursor that is necessary but not sufficient to explain self-harm (such that self-harm only occurs in the presence of dissociation in combination with other factors), or whether dissociation is an early element of an inevitable behavioural chain that results in self-harm.

If supported by future research, these findings have potential clinical implications for a range of female psychiatric patients. In cases where there is a high level of self-harm, the clinician should investigate the possibility that there are pathological levels of abandonment beliefs and dissociation. Where abandonment beliefs are present, they might be addressed through schema-focused cognitive-behavioural or cognitive-analytical methods. It is also likely to be valuable to address levels of dissociation, through enhancing distress tolerance and improving grounding skills (e.g. Kennerley, 1996). However, such a conclusion depends on whether this core belief-dissociation-impulsivity relationship is found in more specific diagnostic subgroups.

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