

Social comparison and submissive behaviour in eating disorder patients

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Abstract

Background: Animal analogues of anorexia nervosa suggest that submissive behaviour and social defeat may be implicated in the onset of wasting diseases. Data from human sufferers of anorexia nervosa and bulimia nervosa are also consistent with the presence of submissive behaviours and perceived low social rank (e.g. low self-esteem, helplessness and feelings of shame).

Method: One hundred and one patients with eating disorders completed the Submissive Behaviour Scale (SBS) and the Social Comparison Rating Scale (SCRS) and their responses were compared with 101 age and sex-matched student controls.

Results: Patients with eating disorders reported significantly higher levels of submissive behaviour and a more unfavourable social comparison than did student controls. Furthermore, levels of submissive behaviour and unfavourable social comparison were significantly related to severity of eating disorder symptoms even after taking account of depressive symptoms and other psychopathology.

Discussion: These preliminary results suggest that ranking theory may have some application to eating disorders. Further research is required to determine whether rank plays a specific role in eating disorders (beyond the increased rates of depression which also occur in eating disorders) and, if so, what its precise role is.

Introduction

Eating disorders are multi-determined (Szmukler et al., 1995) with an aetiology that involves the interaction of biological, psychological, social and familial factors. However, it is possible that many of these factors are related to issues of social rank. This paper is an initial exploration of perceived rank and submissive behaviour in eating disorders. Below we describe data from animal studies that initially prompted this interest in ranking theory. This is followed by a description of ranking theory itself before briefly summarising results from the human literature on eating disorders that are consistent with ranking theory and which provide a rationale for examining rank related variables explicitly.

Animal analogues of anorexia

Treasure & Owen (1996) reviewed evidence from animal studies on wasting syndromes that are thought to be analogues of human anorexia nervosa. Sheep, goats and pigs may all be prone to wasting diseases where, in addition to severe weight loss, there are a number of other features that are remarkably similar to human anorexia nervosa. In pigs, for example, “thin sow syndrome” can develop even when food is freely available. Hyperactivity and a preference for bland foods (such as hay rather than fruit) are also present. Interestingly, thin sow syndrome seems to be triggered by defeat in the competition for social rank, for example when pigs are introduced to a new group and there is competition for hierarchy. Those who lose out and end up low in the pecking order, particularly in those breeds that have been selectively bred for leanness, are at greatest risk of developing thin sow syndrome.

A number of authors (e.g. Gilbert, 1992; Stevens & Price, 2000) have proposed an evolutionary explanation for social hierarchies and describe a ranking theory of depressive disorders in which those who perceive themselves to be of low social rank are most at risk for

developing psychopathology. It is this ranking theory which most directly prompted the study described here since its resonance with the animal data described above was striking.

Ranking Theory

Ranking occurs in all social species where there is competition for resources (such as access to food and mates) and is thought to be a strategy to regulate behaviour and maintain cohesion within the group. This regulation and cohesion is essential since it maintains the existence of the group, a system that has evolved as the most efficient for the survival of many species (including our own) (Gilbert, 1992; Stevens & Price, 2000).

Animals that are of low social rank tend to show submissive behaviours towards dominant others in order to avoid attack. When there is opportunity for escape, this is not problematic. However, when there is no opportunity for escape, the submissive animal may experience physical distress, sometimes even resulting in death. It is proposed that depression is the evolved psychological manifestation of such submissive behaviour in humans when there is no opportunity to escape some dominant other or dominating (entrapping) situation (Gilbert, 1992). Other important outcomes of perceived low rank in humans include low self-esteem, shame and humiliation (Gilbert, 1997).

In support of this view, submissive behaviour (Allan & Gilbert, 1997) and an unfavourable social comparison (Allan & Gilbert, 1995) are shown to be related to psychopathology in both clinical and student groups. Submissive behaviour is also strongly related to passive withdrawal as a strategy for avoiding conflict (Allan & Gilbert, 1997) and to an unfavourable social comparison (Gilbert et al., 1996). In addition, depression is strongly related to social defeat (Gilbert & Allan, 1998) and life events involving humiliation and entrapment are more powerful than loss events that do not involve humiliation/entrapment in

provoking onset of depressive illness (Brown et al., 1995).

Evidence in eating disorders that is consistent with Ranking Theory

There are many findings in the eating disorder literature that are at least consistent with ranking theory. Indicators of perceived involuntary subordination (low social rank) such as feelings of inadequacy, low self-esteem (particularly that which is related to the body: Joiner et al., 1997), lack of assertiveness and the perception that others are more powerful are all commonly reported in patients with eating disorders (e.g. Butow et al., 1993; Williams et al., 1993). Emotions linked to low social rank such as shame, jealousy and envy (Lazarus, 1999) are also associated with, or even predictive of, eating disorders (e.g. Burney & Irwin, 2000; Murphy et al., 2000; Karwautz et al., 2001; Murray et al., 2000; Andrews, 1997; Sanftner et al., 1995). In addition, recent cross-cultural studies of the emergence of eating disorders world-wide have also suggested that loss of social status due to cultural changes may be a risk factor for the development of eating pathology (Nasser, Katzman & Gordon, 2001).

Although submissive behaviour has not been measured directly in eating disorders, other evidence is also consistent with the possibility that submissive behaviour (such as helplessness, avoidance and a perceived lack of control) may also be a feature of these disorders. Studies assessing the adequacy or appropriateness of coping in response to stressful events have shown that women developing eating disorders are more likely to display helplessness, to cope passively and to perceive their efforts as inadequate (Troop & Treasure, 1997a,b; Katzman, 1985). A range of other studies have found that eating disorder patients report increased levels of ineffectiveness (Garner et al., 1983) and feelings of inefficacy over stressful events and emotions (Bandura, 1997). There is ample evidence, then, that cognitive,

behavioural and emotional features of low social rank are commonly reported in women with eating disorders.

The Present Study

While the above findings are consistent with ranking theory they do not conclusively support a specific relationship between rank, comparison, submissiveness and eating disorders. Therefore, the purpose of the present investigation is to explore perceived social comparison and submissive behaviour directly in women with a range of eating disorders. In order to explore this in more detail, however, the structure of social comparison will be examined. In developing their measure of social comparison, the Social Comparison Rating Scale (SCRS), Allan & Gilbert (1995) hypothesised a 3-factor structure for social comparison: (1) social comparison of *rank* (inferior-superior, incompetent-competent, untalented-more talented, weaker-stronger, unconfident-more confident), (2) social comparison of *group fit* (left out-accepted, different-same, outsider-insider) and (3) social comparison of *attractiveness* (unlikeable-likeable, undesirable-more desirable, unattractive-more attractive). Factor analysis identified a 2-factor solution in students with the hypothesised third factor loading onto both and which Allan & Gilbert (1995) separated into a third “pure” factor for theoretical reasons. Since issues concerning attractiveness and the body are generally considered fundamental in eating disorders, the structure of social comparison will also be explored to determine whether some aspects of social rank (i.e. attractiveness) are more important in eating disorders than others (i.e. rank and group fit).

Method

Participants

Eating disorder patients were 94 women and 7 men attending for treatment at the Maudsley and Bethlem Royal Hospital meeting DSM-IV (APA, 1994) criteria for anorexia nervosa (restricting subtype, R/AN n = 23; binge-purge subtype, AN/BN n = 15), bulimia nervosa (BN, n = 51) or eating disorder not-otherwise-specified (EDNOS, n = 12). Questionnaires were posted with appointment letters prior to beginning treatment and were returned either by post or at the first assessment. The response rate (including only those patients that actually attended for assessment) was approximately 80%. Comparison participants were drawn from previously published student samples completing the same measures of social comparison and submissive behaviour. Questionnaires were given out during lectures and students were invited to complete them in their own time, returning questionnaires the following week. Since questionnaire responses included here represent a sub-sample selected from larger pools of data from more than one study, it is impossible to calculate a response rate and, hence, to comment on the generalisability of this sample. However, comparison participants were selected specifically to provide a match with eating disorder patients based on age and gender. Ninety-nine could be matched exactly for age and gender and only two matches had to be made with students and patients a year apart in age.

Measures

Symptoms: Eating disorder diagnoses were made for those attending for treatment by experienced clinicians (senior clinical psychologists or consultant psychiatrists) according to DSM-IV criteria (APA, 1994). Severity of eating disorder symptoms was also assessed in these patients using the Eating Disorders Inventory (EDI; Garner et al., 1983) and other psychological symptoms were assessed using the Symptom Checklist (SCL-90-R; Derogatis, 1983). Because of its hypothesised relationship with depression, the depression sub-scale of

the SCL-90-R is of particular interest although correlations using the depression sub-scale are repeated using the global severity index (GSI) in order to take account of other general symptoms. Comparison participants were not screened for eating disorders or other psychopathology and did not complete the EDI or SCL-90-R.

Social comparison: Social comparison, a measure of perceived social rank, was measured using the Social Comparison Rating Scale (SCRS: Allan & Gilbert, 1995). This is an 11-item scale in which respondents rate their perceptions of self in relation to others on 10-point scales, anchored at either end by descriptors such as *unattractive-attractive*, *weak-strong* etc. Scores of around 60 would indicate that the respondent perceived her/himself as no better or worse than anyone else. Scores below this would indicate an unfavourable comparison and perceived low social rank while scores above this would indicate a favourable comparison and perceived high social rank. Internal α -reliability of the SCRS was .93 in patients and .91 in students. Previous factor analyses of this measure suggest that the SCRS tapped three aspects of social comparison: social comparison of rank, social comparison of group fit and social comparison of attractiveness (Allan & Gilbert, 1995).

Submissive behaviour: Submissive behaviour was measured using the Submissive Behaviour Scale (SBS: Allan & Gilbert, 1997). This is a 16-item uni-dimensional questionnaire in which respondents rate a series of statements on a 5-point scale (ranging from 0 to 4). Statements refer to behaviours such as avoiding eye contact with others or walking out of a shop, knowing you had been short-changed but without challenging the shopkeeper. Higher scores indicate more submissive behaviour. Internal α -reliability of the SBS was .88 in both the patient and student samples.

Data Analysis

Principal components factor analysis with oblique rotation was carried out on SCRS responses in the two groups separately to explore the structure of social comparison in these samples. Since variances on the SCRS and SBS differed significantly between patient and student groups, non-parametric tests were used for group comparisons. Groups were compared using Wilcoxon signed ranks test where each eating disorder patient was paired with her/his matched student control. Logistic regression (with patient/student as the dependent variable and scores on the SCRS and SBS as the independent variables) was carried out to determine the independent relationships of these variables. Partial correlations were also performed in the eating disorder sample to determine whether the relationships between eating disorder symptoms and scores on the SCRS and SBS were independent of their association with depression and other psychiatric symptoms.

Results

Sample characteristics

Table 1 shows the sample characteristics of the eating disorder subgroups and the students. Within the eating disorder patients, those with anorexia nervosa or the restricting (R/AN) and binge/purge (AN/BN) subtypes reported the lowest body mass index and patients with restricting anorexia nervosa were significantly younger than all other patients ($F_{3,97} = 4.57$, $p < 0.01$). Eating disorder sub-groups did not differ significantly on the SCL, either in terms of the GSI ($F_{3,86} = 0.24$, $p = 0.87$) or the depression sub-scale ($F_{3,86} = 0.45$, $p = 0.72$), although there was a trend towards significance for bulimia nervosa patients to score more highly than other patient groups on the EDI ($F_{3,87} = 2.42$, $p < 0.08$). Patient subgroups did not differ significantly on either the SBS ($F_{3,96} = 2.10$, $p = 0.11$) or the SCRS ($F_{3,96} = 1.52$, $p = 0.22$) and so all patients are combined for comparison with control participants (N.B. one patient

completed the SBS but not the SCRS while another patient completed the SCRS but not the SBS, hence the reduced degrees of freedom).

Table 1 about here

Structure of the Social Comparison Rating Scale

The 11 items of the SCRS were subjected to a principal components factor analysis in patients and students separately. In students, three factors had Eigen-values above 1, all three of which also explained more than 5% of the variance. In the eating disorder patients, however, only two factors had Eigen-values greater than one, although three factors explained more than 5% of the variance. The third factor only just failed to meet the criterion of Eigen-value ≥ 1 (0.95) and examination of the Scree plot did support the possibility of a three-factor solution in patients. Since this is an exploratory study, factor analyses were performed on the two samples separately using an oblique rotation and a forced 3-factor solution accounting for a total of 78.8% and 73.8% of the variance in patient and student samples respectively. The factor loadings are shown in Table 2.

Table 2. about here

Items on the three factors obtained in the student sample are broadly consistent with the original hypothesised factors of social comparison of *rank* (factor 1), *group fit* (factor 2) and *attractiveness* (factor 3) except that the “unlikeable-more likeable” item loads on *group fit* rather than *attractiveness*. The factor loadings in the patient sample, however, suggest a rather different interpretation. The dominant factor (factor 1) contains two items that were originally designated as *social comparison of attractiveness* (undesirable-more desirable, unattractive-more attractive), two items originally designated as *social comparison of rank* (weaker-stronger, unconfident-more confident) and one item originally designated as *social comparison of group fit* (different-same). As was the case for the student sample, “unlikeable-

more likeable” also loaded on *group fit* rather than *attractiveness* as originally hypothesised.

The structure of social comparison, therefore, differs between student and eating disorder samples and these groups cannot be compared directly with the sub-scales hypothesised by Allan & Gilbert (1995). For both samples, however, one dominant factor emerged accounting for most of the variance. Item-loadings on this unrotated single factor were all above 0.67 for the patient sample and all above 0.53 for the student sample. This suggests that, although the factor structure differs in eating disorder patients and students, social comparisons of *group fit*, *attractiveness* and *rank* can be represented adequately by a single factor in both groups.

Social comparison and submissive behaviour in eating disorder patients and students

Wilcoxon signed ranks test showed that patients had significantly lower SCRS scores ($z = -6.74$, $p < .001$, means are 42.3 (s.d. 18.7) and 62.1 (s.d. 14.2) respectively) and significantly higher SBS scores ($z = 6.62$, $p < .001$, means are 34.3 (s.d. 11.0) and 22.7 (s.d. 8.5) respectively) than their matched student controls. Since scores on the SBS and SCRS were highly and negatively correlated in both the patient and student groups (r s are -0.74 and -0.50 respectively, both p s < 0.001) a logistic regression analysis was carried out (with patient versus student as the dependent variable). Both SCRS and SBS scores were required to predict group (Wald = 7.50, $p < .01$ for SCRS and Wald = 12.20, $p < .001$ for SBS) suggesting that differences on these two variables had unique effects. Thus, in support of the main hypothesis, patients with eating disorders reported unfavourable comparisons with others and more submissive behaviours.

Correlations between rank variables and symptoms in eating disorder patients

Within the eating disorder patient group, bivariate and partial correlations were calculated between scores on the EDI and SCL (the depression sub-scale and the overall global severity index (GSI)) and scores on the SCRS and SBS. Table 3 shows that scores on the SCRS and SBS are highly significantly correlated with scores on the EDI, even after taking account of scores on the depression sub-scale of the SCL (upper part of the table) or even the of the GSI (lower part of the table). Similarly, scores on the SCRS are significantly correlated with scores on the SCL depression sub-scale and GSI, even after taking account of scores on the EDI. However, the correlation between SBS and the SCL depression sub-scale fell just short of conventional levels of significance when EDI scores were partialled out ($p = .06$) although the equivalent partial correlation for the GSI score showed that the association with SBS scores fell a long way short of significance. Thus, social comparison and submissive behaviour appear to be related to eating disorder symptoms independently of their association with depression or general psychiatric symptoms.

[Table 3 about here](#)

Discussion

This preliminary study measured perceived social rank and submissive behaviour in a large sample of mainly female eating disorder patients. Comparison participants were students who were matched for age and gender.

Patients with eating disorders compared themselves less favourably with others than did student controls. Eating disorder patients also reported themselves to be more submissive in everyday life than did student controls. Unfavourable social comparison and submissive behaviour were significantly related to eating disorder symptoms even when other symptoms (in particular, depression) were taken into account.

In their earlier report describing the development of the Social Comparison Rating Scale (SCRS), Allan & Gilbert (1995) hypothesised a three-factor structure of *social comparison of rank*, *social comparison of group fit* and *social comparison of attractiveness*. While this was essentially supported in the student sample in the present study, the factor structure in the patient sample was quite different. For students, *social comparison of attractiveness* formed the third factor and contained two items (undesirable-more desirable, unattractive-more attractive). For patients, these two items were included in the first (and most dominant) factor which also contained two *rank* items (weaker-stronger, unconfident-more confident) and one *group fit* item (different-same). Whether the difference in the factor structure of the SCRS is meaningful or not requires replication of the factor structure in other eating disorder samples. However, preliminary though these results are, it is possible to speculate on what they may mean. Although the student sample was clearly able to differentiate issues concerning attractiveness from issues of rank and group fit, the eating disorder sample was not. It is possible that the difference in structure reflects differences in the cognitive representation and organisation of information relating to these issues in eating disorder patients. However, such a possibility must remain speculation until the architecture of social comparison is further evaluated in other eating disorder samples. It had been hoped initially that the same/similar structure would emerge for both samples in order to explore whether some issues of social comparison are more important than others in eating disorder patients (e.g. social comparison of attractiveness rather than social comparison of group fit). Although this goal could not be achieved, the information suggested by this factor analysis may still prove useful, even if for no reason other than to generate more specific hypotheses concerning the issue of social rank in eating disorders.

Before discussing the implications of these findings we would like to acknowledge a

number of limitations. The first of these is the cross-sectional nature of the study. It remains for future longitudinal research to determine whether and how perceived low social rank is involved in onset, maintenance and recovery from eating disorders. We are currently addressing this issue in another sample. Another potential problem is that patients from a tertiary referral centre were used in this study and it is not clear whether they are representative of sufferers with eating disorders in general. It may be the case that it is those who show such unfavourable social comparison and submissive behaviour that are most likely to seek treatment. The present sample included a broad spectrum of eating disorder diagnoses in patients recruited from a tertiary referral centre. The relevance of social rank to patients with other conditions (e.g. obesity) and from different sources (e.g. those in primary care or even those not in treatment) remains to be tested. In other words, issues of social rank may not necessarily play a role in eating disorders universally but rather they may concern the way in which patients participating here came to arrive for treatment in a specialist setting. Students in the present study did not complete measures of eating disorder or other psychopathology and also were not screened for psychiatric disorders. Nevertheless, their mean scores on the SBS and SCRS were similar to those reported in student samples elsewhere and are therefore probably comparable with other student samples.

Another potential weakness concerns level of education. All of the comparison group were currently studying for a degree whereas the eating disorder group is likely to be more heterogeneous with regards to education. It is possible that rank and status are influenced by the level of education achieved which may therefore have confounded the results. Since level of education was not assessed in the patient group this possibility cannot be tested directly. However, in another unpublished study using the SCRS and SBS, we have obtained level of education from a separate sample of women with a history of eating disorders - those who

have or are studying for a degree do not differ from those who did not go into higher education ($t_{1,178} = 1.17$ and -1.47 for the SCRS and SBS respectively, both $p = ns$).

Difference in educational level, therefore, is unlikely to account for differences in ranking variables.

Probably the most crucial weakness, however, is that depression was not assessed in the student group. To date, ranking theory has been applied most rigorously to depression and the findings in the eating disorder literature that are consistent with ranking theory may simply be an artefact of increased levels of depression in eating disorder patients. Within the eating disorder group depression was partialled out of the correlations between eating disorder symptoms and ranking variables and these were still highly significant. Nevertheless, it will be important for future research to determine whether social rank plays a specific role in eating disorders (as is perhaps hinted by the differences in the factor structure of the SCRS) or whether social rank is unrelated to eating disorders *per se* but that such issues may be commonly found in those eating disorder patients if they are also depressed.

Considering the preliminary nature of this study, as well as the limitations outlined above, it is perhaps premature to pronounce too confidently on the implications of a ranking theory account of eating disorders. Nevertheless, it is perhaps still worth highlighting one or two contrasts with other models. Results are not incompatible with earlier socio-cultural models of eating disorders although these have tended to focus primarily on the thin-ideal, physical attractiveness and efforts to enhance self-esteem by attempting to achieve unrealistic body types (e.g. Stiegel-Moore et al., 1986; Stice, 1994). However, a ranking theory account conceives of attractiveness in much broader terms and, labelled “social attention holding power”, is considered to be a key process in the achievement of social standing whereby status may be freely given (or withheld) by others. As such, ranking theory moves away from

purely body- and food-related concepts, embracing concepts of power and attractiveness.

Interestingly, more recent socio-cultural models have also begun to move away from the traditional focus on body image and instead emphasise women's diminished position in society (Nasser, Katzman & Gordon, 2001). Although these also invoke issues of powerlessness, social comparison and status, they do so at the level of groups rather than at the level of individuals within a group.

One possible clinical implication of adopting a ranking approach to eating disorders is the reframing of attractiveness as social attention holding power. The power to hold others' attention is not limited to physical beauty but may be any feature or ability that is valued (Gilbert, 1997). Thus, it can be anything from witty conversation to organisational skills depending on the situation or social context. To the extent that social comparison of attractiveness in women with eating disorders generally focuses on the physical, it may prove an important aspect of therapeutic practice to broaden the sufferer's concept of attractiveness to include other attributes that are of social value. However, what is valued socially by the sufferer or, perhaps more importantly, her immediate social network may either limit or facilitate this process. More generally, a focus on issues of rank and submission is also consistent with competency-based treatment programmes (e.g. Weiss et al., 1986) that help women focus on the *function* rather than the *form* of their bodies, the achievement of social effectiveness rather than how they look.

The present study is a preliminary application of ranking theory to eating disorders. It appears that social rank is certainly an important issue in eating disorders, it is related to eating disorder severity independently of other psychological symptoms (particularly depression) and there is a possibility that people with eating disorders conceive of attractiveness, rank and group fit in a relatively undifferentiated way.

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Table 1. Clinical characteristics and levels of submissive behaviour and social comparison (means and s.d.s)

	R/AN	AN/BN	BN	EDNOS	Student controls
Age	21.6 (4.6)	27.3 (9.1)	28.5 (7.2)	26.8 (10.8)	26.7 (7.7)
BMI	16.3 (3.9)	17.3 (1.9)	24.6 (9.1)	22.8 (4.7)	
EDI	82.7 (33.2)	82.4 (32.0)	100.8 (32.7)	83.7 (24.0)	
SCL-GSI	1.72 (0.82)	1.78 (0.65)	1.79 (0.82)	1.57 (0.81)	
SCL-dep	2.30 (1.06)	2.43 (0.76)	2.37 (0.91)	2.03 (1.07)	
SBS	34.2 (12.0)	33.2 (8.9)	36.2 (10.9)	27.6 (9.71)	22.7 (8.5)
SCRS	44.3 (22.4)	45.1 (17.6)	38.8 (17.8)	50.5 (13.5)	62.1 (14.2)

BMI = Body mass index (kg/m²)

EDI = Eating Disorders Inventory (Garner et al., 1983)

SCL = Symptom Checklist (Derogatis, 1983)

SBS = Submissive behaviour scale (Allan & Gilbert, 1997)

SCRS = Social comparison rating scale (Allan & Gilbert, 1995)

Table 2. Loadings for the 3-factor solutions of the Social Comparison Rating Scale in patient and student samples

	Patient sample			Student sample		
	1	2	3	1	2	3
Inferior – superior			0.56	0.59		
Incompetent – more competent		0.66		0.90		
Untalented – more talented		0.74		0.67		
Weaker – stronger	0.90			0.64		
Unconfident – more confident	0.83			0.56		
Left out – accepted			0.94		0.87	
Different – same	0.78				0.80	
An outsider – an insider			0.74		0.54	
Unlikeable – more likeable			0.88		0.84	
Undesirable – more desirable	0.70					-0.74
Unattractive – more attractive	0.79					-0.94
Eigen-values	6.62	1.10	0.95	5.77	1.34	1.01
Percentage variance accounted for	60.2%	10.0%	8.6%	52.4%	12.2%	9.2%

Table 3. Bivariate and partial correlations between SBS, SCRS and symptom scores in eating disorder patients (n = 85)

	<u>Bivariate correlations</u>		<u>Partial correlations</u>	
	<u>EDI</u>	<u>SCL-dep</u>	<u>EDI</u> ¹	<u>SCL-dep</u> ²
<u>Table 3a</u>				
SBS	0.47***	.54***	.36**	.23
SCRS	-0.54***	-.64***	-.45***	-.34**
	<u>EDI</u>	<u>SCL-GSI</u>	<u>EDI</u> ¹	<u>SCL-GSI</u> ²
<u>Table 3b</u>				
SBS	0.47***	0.44***	0.25*	0.20
SCRS	-0.54***	-0.48***	-0.30**	-0.27*

* p < 0.05

** p < 0.01

*** p < 0.001

¹Controlling for SCL-depression (Table 3a) or SCL-GSI (Table 3b)

²Controlling for EDI