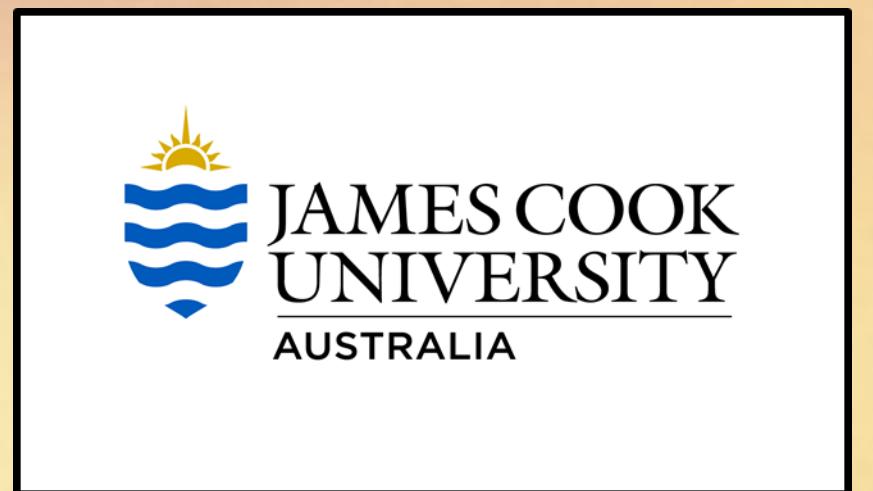


RUMINATION, COGNITIVE-BEHAVIOURAL AVOIDANCE AND DEPRESSION IN AN AUSTRALIAN CLINICAL SAMPLE



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ABSTRACT:

The study re-investigated the factor structure of the Cognitive-Behavioural Avoidance Scale (Ottenbreit & Dobson, 2004). The study then investigated the relationship between avoidance, rumination and depression in terms of gender, age, life events and unique variance using the reinvestigated scale to measure cognitive-behavioural avoidance. Participants consisted of 158 severely depressed and anxious inpatients; there were 75 men (mean age of 49.9 years) and 83 females (mean age of 44.6 years). Participants completed the Cognitive-Behavioural Avoidance Scale; the Depression, Anxiety and Stress Scale; Brief COPE; The Ways of Coping Questionnaire – Escape – Avoidance Scale and the Response Styles Questionnaire – Rumination Scale. The Cognitive-Behavioural Avoidance Scale was a valid instrument for measurement of avoidance in this sample but, after factor analysis, it differed in its subscale structure from the original published version. Females had higher scores on all constructs; overall use of rumination decreases with age but there were different results for the three constructs when age by gender was examined; interpersonal life events were important for all participants and avoidance did contribute unique variance to the construct of depression.

“When we ruminate, we become fruitlessly preoccupied with the fact that we are unhappy and with the causes, meanings, and consequences of our unhappiness.”

— Mark Williams, *The Mindful Way through Depression: Freeing Yourself from Chronic Unhappiness*

Design

The study used a survey methodology with a self-reported questionnaire. All participants were volunteers.

Recruitment of Participants

Participants were recruited from inpatients and day patients of a treatment clinic on the Gold Coast and from the private patients of the associated medical and allied health staff of the clinic.

Measures:

The Cognitive – Behavioural Avoidance Scale (CBAS: Ottenbreit & Dobson, 2004)

The COPE Scale (Carver, Scheier & Weintraub, 1989)

The Ways of Coping Questionnaire – Escape – Avoidance Scale (WCQ: Folkman & Lazarus, 1985)

The Depression, Anxiety and Stress Scale (DASS- 21 item; Loviband & Loviband, 1995)

Response Styles Questionnaire – Rumination Scale (RSQ; Nolen-Hoeksema & Morrow, 1991)

Demographic items - gender, age

Study 1 -Aim: To validate the new measurement instrument for avoidance, the Cognitive-Behavioural Avoidance Scale (CBAS) using a clinical sample from a psychiatric hospital.

The overall Cognitive Behavioural Avoidance Scale was found to be a valid and reliable measure when used in the current clinical sample. The Behavioural Model of Depression suggested that use of avoidant coping strategies by depressed persons is common. Factor analysis could only justify and interpret three factors which accounted for 48.28% an amount greater than Ottenbreit and Dobson’s (2004) solution where they accounted for 44.95%. The new three factors are: Behavioural Social, Task Avoidance and Cognitive Avoidance.

Study 2 - Aim: An examination of the relationship between avoidance, as measured by the Cognitive-Behavioural Avoidance Scale, and rumination in psychiatric patients specifically focussing on depression.

Hypothesis 1: That there will be gender differences in avoidance, rumination and depression.

Examination of the gender differences between the measures for depression, avoidance and rumination showed females had higher scores than males on depression, Task Avoidance and rumination. The hypothesis, as predicted by the Cognitive Vulnerability – Transactional Stress Theory is supported.

Hypothesis 2- That there will be age differences in avoidance, rumination and depression.

Age is positively associated with months since diagnosis and anxiety but decreases the use of rumination. When examining gender, age has almost the opposite impact for each of the genders. For females there is only a significant correlation between age and CBAS-CA whilst for males this is the only relationship that is not significant. For males increasing age decreases the use of, or the association with, all variables except months since diagnosis.

Hypothesis 3- That significant life events precede depression.

Significant life events did not precede diagnosis in the present research. The mean time since diagnosis for participants was about five years. The hypothesis, which has its basis in Skinners Operant Conditioning, is not supported.

Hypothesis 4- That after controlling for anxiety and rumination, avoidance will contribute unique variance in the prediction of depression. This hypothesis is supported.

Table 3
Means and Standard Deviations (SD) of questionnaire measures by age group for total sample and by gender including test of age group differences

Measure	Age group	Mean (SD)	t-test, p	Cohen's d
Total CBAS - Total	Younger	91.99 (21.62)	NS	
	Older	91.50 (23.16)		
CBAS - BS	Younger	28.10 (7.87)	NS	
	Older	28.10 (8.63)		
CBAS - TA	Younger	17.09 (9.86)	NS	
	Older	17.03 (10.64)		
CBAS - CA	Younger	29.45 (8.48)	NS	
	Older	28.36 (8.27)		
DASS - Anxiety	Younger	10.61 (5.55)	NS	
	Older	9.29 (5.70)		
DASS - Depression	Younger	13.56 (5.80)	NS	
	Older	12.18 (6.66)		
RSQ	Younger	64.41 (13.29)	NS	
	Older	61.33 (14.24)		
Male CBAS - Total	Younger	96.03 (19.99)	3.15**	.72
	Older	83.22 (20.28)		
CBAS - BS	Younger	21.03 (7.81)	3.24**	.75
	Older	22.57 (7.26)		
CBAS - TA	Younger	17.81 (9.29)	2.54*	.59
	Older	13.10 (9.58)		
CBAS - CA	Younger	29.93 (7.86)	NS	
	Older	27.02 (7.70)		
DASS - Anxiety	Younger	10.64 (5.16)	2.27*	.52
	Older	7.80 (5.10)		
DASS - Depression	Younger	13.57 (6.42)	2.10*	.48
	Older	9.90 (6.31)		
RSQ	Younger	64.93 (13.83)	3.55**	.82
	Older	55.52 (14.51)		
Female CBAS - Total	Younger	88.69 (21.92)	NS	
	Older	99.77 (23.89)		
CBAS - BS	Younger	28.58 (8.66)	NS	
	Older	30.86 (8.25)		
CBAS - TA	Younger	16.09 (10.30)	-2.44*	-.54
	Older	41.49 (10.18)		
CBAS - CA	Younger	26.76 (7.57)	-2.30*	-.51
	Older	31.06 (9.81)		
DASS - Anxiety	Younger	10.53 (5.75)	NS	
	Older	10.78 (5.80)		
DASS - Depression	Younger	13.51 (5.88)	NS	
	Older	14.40 (6.30)		
RSQ	Younger	63.60 (14.33)	NS	
	Older	67.32 (12.12)		

Note: CBAS - Total = Cognitive Behavioural Avoidance Scale Total score, BS = Behavioural Social, TA = Task Avoidance, CA = Cognitive Avoidance, DASS = Depression Anxiety and Stress Scale, RSQ = Response Styles Questionnaire. Total: Younger n = 77, Older n = 77, Male: Younger n = 40, Older n = 35, Female: Younger n = 41, Older n = 42. *p < .05. **p < .01.

Table 1
Demographic Variables for Clinical Sample (N = 158)

	Male (N = 75)	Female (N = 83)
Age (mean) (standard deviation) (range)	49.9 (13.8) (19 - 87)	44.6 (13.3) (18 - 67)
Months since diagnosis (mean) (standard deviation) (range)	53.6 (75.1) (1 - 360)	63.9 (95.5) (0 - 580)
Self-reported diagnosis*	Overall (%)	Male (%) Female (%)
Mood disorder	51 (67.1)	26 25
Anxiety disorder	13 (18.2)	7 6
Mood and anxiety	39 (52.5)	11 10
Mood and co-morbid	20 (27.6)	10 10
Anxiety and co-morbid	8 (15)	5 3
Mood and anxiety and co-morbid	10 (15.3)	5 5
Other	17 (23.3)	11 6
Medication* (86.2% overall reported being on medication)	63 (89.6)	27 36
Anti-depressant	1 (6)	0 1
Anti-anxiety	3 (11.9)	2 1
Anti-psychotic	3 (11.9)	3 0
Other	67 (82.1)	30 37
No medication or did not answer	21 (28.4)	13 8
Number of Life Events Reported	0	92 (58.5)
1	39 (51.5)	13 28
2	17 (22.7)	7 10
3	8 (10.7)	4 2
4	2 (2.7)	0 2
5	1 (1.3)	0 1
6	1 (1.3)	0 1
Type of Life Events Reported*	Total	39 66
Relationship issues	36 (14.2)	13 23
Work related	15 (19.7)	7 8
Health of self	12 (16.0)	2 10
Health of others	29 (37.9)	11 18
Other	11 (14.6)	6 7

Note: Missing data on age and months since diagnosis (male n = 4, female n = 6). *Derived from classifications used by Diagnostic and Statistical Manual for Mental Disorders-IV-TR (APA, 2005). †Taken from MIMS Disease Management Australia issue No. 3, 2009, as transcribed into categories by the 1st author.

Table 2
Factor Loadings for Cognitive Behavioural Avoidance Scale Items

Items number and condensed description	Factor 1 - Behavioural Social	Factor 2 - Task Avoidance	Factor 3 - Cognitive Avoidance
1. Avoid attending social activities	.77	.25	.02
21. Make excuses to get out of social activities	.75	.30	.17
14. Do not go to events when people do not know	.74	.09	.26
15. Instead thinking, tell self prefer to be alone	.60	.22	.29
17. Want to leave social gatherings	.70	.20	.21
24. Remain to self during social gatherings	.55	.15	.38
28. Rather than getting out, sit home watch TV	.48	.33	.15
8. Do not answer phone in case social invitation	.49	.34	-.01
23. Turn down socializing with opposite sex	.39	.33	.32
4. Fail to follow through with achievement goals	.17	.65	.25
11. Think not able to complete challenging tasks	.33	.62	.12
31. Avoid tasks that are really important	.34	.61	.29
7. Turn down opportunities education/career	.19	.60	.35
27. Decisions work, do not get down to it	.11	.60	.32
9. Quit activities that challenge too much	.33	.58	.20
13. Avoid trying activities potential for failure	.37	.51	.19
25. Avoid making decisions about future	.31	.50	.38
29. Distract self when think about performance	.07	.49	.32
5. Avoid disappointment, not serious work	.14	.44	.28
6. Rather than try new activities, do what know	.34	.44	.18
3. Like to achieve, but have to accept limits	.12	.38	-.08
26. Confusion in relationships, not try figure out	.11	.14	.76
30. Not think how solve family problems - useless	.04	.16	.58
19. Try not to think about future/what to do with life	.16	.20	.57
20. Wait tension in relationships, hope go away	.31	.06	.57
10. Try not think problems in relationships	.10	.04	.52
18. Try not to think about how improve performance	.11	.35	.50
12. Should make decisions relationships, let go on	.34	.30	.41
22. Nothing can do improve relationship problems	.29	.12	.41
2. Uncertain future, do not think about what want	.07	.28	.38
16. Fail to address tension in friendship	.29	.16	.36
Eigenvalue	10.78	2.28	1.91
% Variance	34.76	7.35	6.17

Note: Items loading substantially on factors are presented in bold-face type.

Table 4
Mean/standard deviation (SD) and range (total sample and by gender) for the Cognitive Behavioural Avoidance Scales and other questionnaire measures including gender differences

Measure	Total	Male		Female		t	p
		Mean (SD)	Range	Mean (SD)	Range		
CBAS - Total	91.74 (22.38)	44 - 145	89.20 (21.02)	44 - 136	94.03 (23.43)	44 - 145	NS
CBAS - BS	28.88 (8.34)	9 - 45	28.12 (8.14)	9 - 45	29.56 (8.51)	9 - 45	NS
CBAS - TA	37.06 (10.25)	12 - 59	35.50 (9.68)	12 - 59	38.65 (10.55)	17 - 59	2.07*
CBAS - CA	28.62 (8.27)	10 - 50	28.38 (7.86)	10 - 45	28.84 (8.67)	11 - 50	NS
DASS - Anxiety	9.91 (5.56)	0 - 21	9.13 (5.29)	0 - 21	10.63 (5.74)	11 - 50	NS
DASS - Depression	12.84 (6.33)	0 - 21	11.61 (6.58)	0 - 21	13.94 (5.92)	0 - 21	2.34*
RSQ	62.79 (13.84)	27 - 88	59.92 (13.89)	27 - 85	65.40 (13.36)	29 - 88	2.53*

Note: CBAS - Total = Cognitive Behavioural Avoidance Scale Total Score, BS = Behavioural Social, TA = Task Avoidance, CA = Cognitive Avoidance, DASS = Depression Anxiety and Stress Scale, RSQ = Response Styles Questionnaire, NS = Not Significant. Males n = 75, Females n = 83. *p < .05.