The relation of early environmental experience to shame and self-criticism: Psychological pathways to depression

Karin Sandquist  
*University of Wollongong*, ks429@uow.edu.au

B. F. S. Grenyer  
*University of Wollongong*, greyner@uow.edu.au

Peter Caputi  
*University of Wollongong*, pcaputi@uow.edu.au

Follow this and additional works at: [https://ro.uow.edu.au/hbspapers](https://ro.uow.edu.au/hbspapers)

Part of the Arts and Humanities Commons, Life Sciences Commons, Medicine and Health Sciences Commons, and the Social and Behavioral Sciences Commons

**Recommended Citation**


Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au
The relation of early environmental experience to shame and self-criticism: Psychological pathways to depression

Abstract
Self-criticism has been identified as a particularly malignant personality variable that confers vulnerability for the development of depression. Although impressive literature on depressive symptoms and the personality variable self-criticism exists, few studies have examined the origins of a self-critical style and little is currently known as to how the self-conscious affect of shame may impact this link. The aim of this study was to test a more comprehensive path model of depressive symptoms. The proposed model suggested that self-criticism originates from a parental style characterised by low parental warmth and high parental control, with self-criticism and shame representing mediating variables between parental bonding and depression. Participants were 201 undergraduate students who completed measures of parental bonding styles, self-criticism, shame and depressive symptoms. The evaluation of the measurement model utilising partial least squares in part supported the combination of the proposed variables. The implications of these findings for theory and practice are discussed.

Keywords
depression, pathways, environmental, early, experience, shame, self, criticism, relation, psychological

Disciplines
Arts and Humanities | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

This conference paper is available at Research Online: https://ro.uow.edu.au/hbspapers/383
The Relation of Early Environmental Experience to Shame and Self-Criticism: Psychological Pathways to Depression

Karin G. E. Sandquist (ks429@uow.edu.au)
School of Psychology
University of Wollongong, Wollongong NSW 2522 Australia

Brin F. S. Grenyer (grenyer@uow.edu.au)
School of Psychology
University of Wollongong, Wollongong NSW 2522 Australia

Peter Caputi (caputi@uow.edu.au)
School of Psychology
University of Wollongong, Wollongong NSW 2522 Australia

Abstract

Self-criticism has been identified as a particularly malignant personality variable that confers vulnerability for the development of depression. Although impressive literature on depressive symptoms and the personality variable self-criticism exists, few studies have examined the origins of a self-critical style and little is currently known as to how the self-conscious affect of shame may impact this link. The aim of this study was to test a more comprehensive path model of depressive symptoms. The proposed model suggested that self-criticism originates from a parental style characterised by low parental warmth and high parental control, with self-criticism and shame representing mediating variables between parental bonding and depression. Participants were 201 undergraduate students who completed measures of parental bonding styles, self-criticism, shame and depressive symptoms. The evaluation of the measurement model utilising partial least squares in part supported the combination of the proposed variables. The implications of these findings for theory and practice are discussed.

Depression is a serious mental health problem, with significant consequences in terms of human suffering, lost productivity, and even loss of life (Wulsin, Vaillant, & Wells, 1999). Current estimates suggest that 16% of the population will experience an episode of depression at some point in their lives (Kessler et al., 2003). Given this substantial public health significance, considerable research attention has been devoted to improving understanding of this complex problem.

One core focus of depression research has been the investigation of personality vulnerabilities (Zuroff, Mongrain & Santor, 2004). Indeed, it has been argued that research on vulnerability has emerged as a focal point in efforts to understand, treat, and prevent affective disorder (Ingram, Miranda, & Segal, 1998). The trait of self-criticism has been identified as a particularly malignant personality variable that is commonly implicated in the development and maintenance of depression. Self-critical individuals experience depression that is focused primarily on issues in which their self-concept are central (i.e. self-worth and autonomy); they berate, criticise, and attack themselves, and experience intense feelings of shame, guilt, failure and worthlessness (Blatt, 1995). Self-critical individuals are more likely to become depressed (Blatt & Zuroff, 1992), less likely to respond to treatments (Rector, Bagby, Segal, Joffe & Levitt, 2000) and more likely to relapse when they do respond (Teasdale & Cox, 2001). Theory and research has suggested that these individuals exhibit an inability to soothe oneself (e.g., Blatt & Zuroff, 1992), and furthermore an inability to resist one’s self-attacks (e.g., Whelton & Greenberg, 2005), signifying the seriousness of this subtype of depression and indicative of the difficulties these people are likely to experience in trying to improve and respond to therapy.

Although literature on the personality variable self-criticism and depressive symptoms exists, little understanding of these complex phenomena is available. For example, few studies have investigated the origin of a self-critical style and little is currently known as to how the self-conscious affect of shame may impact this link. The present investigation examines a comprehensive psychological path model of depression that integrates parental bonding, self-criticism and shame as factors influencing current mood functioning.

Most theoretical models of the origin of self-criticism focus on early parent-child interactions as the source of this style. Blatt and Homann (1992) proposed that self-criticism is related to parental control, intrusion, and inconsistent expressions of affection. In support of Blatt’s hypotheses, McCranie and Bass (1984) showed that persons high in self-criticism retrospectively described their parents as emphasising strict control and inconsistent expression of affection. In a prospective longitudinal study, Koestner, Zuroff and Powers (1991) found that children’s levels of self-criticism at age 12...
were associated with perceived parental demands for obedience, accompanied by low levels of warmth and responsiveness reported by their mothers when the child was age 5. A more recent study found that self-critical mothers and fathers reported being less loving and more controlling parents, which predicted self-criticism in daughters (Amitay, Mongrain & Fazaa, 2008). Overall, parental expression of low warmth (or care) and high control (or overprotection) appears to be important in the development of a self-critical style. Research suggests that children are postulated to internalise these experiences to form negative internal working models of self, other, and self-other relationships, which influence subsequent interpersonal interactions (e.g., Blatt & Homann, 1992). Negative childhood experiences of self-critical individuals seem to contribute to a pattern of entering, creating, or manipulating subsequent interpersonal environments in ways that perpetuate their negative self-image and increase vulnerability to depression (for a review of relevant literature, see Zuroff et al., 2004).

It has been suggested that cognitive factors such as self-criticism serve as the final common pathway to depression, at least for depression that is primarily psychologically mediated (Ingram et al., 1998). However, recently the impact of emotional factors in the development of depression have been receiving increasing interest and it has been suggested that the path from self-criticism to depression may not be direct but rather mediated by other variables (e.g. Blatt, 1995). Indeed, self-critical cognition is often accompanied by experience of the self-conscious affect, shame (Greenberg, Watson & Goldman, 1998). Shame has been described as experiencing one’s external and internal worlds as hostile and persecuting (Gilbert, 1997) and is linked to the notion of self-concept (Tagney, 2002). Given self-criticism has a particular focus on issues in which the self-concept is central, it is not surprising that shame has been found to be prevalent among self-critical subjects (Cheung, Gilbert, & Irons, 2004). Sorotzkin (1985) noted that individuals with a high level of self-criticism are predisposed to feelings of shame, to negative affect associated with personal failure, and to inadequacy. He further suggests that inevitable failure to live up to the self-critical person’s standards results in profound shame that attacks the very fabric of the self. Greenberg et al (1998) proposed that, while negative cognitions are a core component of self-criticism, the principal antecedent of states of depressive helplessness are the harsh negative affect which accompanies the self-criticism. Furthermore, in this model self-criticism is secondary to the incapacity of the self to counter these self-critical attacks. Greenberg and colleagues argued that it is much more the person’s response to the negative cognitions and their inability to cope with self-criticism; it is not simply the cognitions and criticisms alone that lead to depression (Greenberg, Elliott, & Foerster, 1990).

Despite the link between self-criticism and shame, empirical research in support of the factor shame and its relationship to self-criticism is largely unexplored. However, the few available reports suggest that shame plays an important mediating role between the path from self-criticism to depression (Ashby, Rice, & Martin, 2006), supporting an indirect role of self-criticism in depression. Whelton and Greenberg (2005) found that people high in self-criticism often submitted to their own self-criticisms, expressed shamed and sad faces when reflecting on their self-criticism, and felt weak and unable to counteract their own attacks. Overall, these two studies highlight the importance of emotional experience as an independent variable accompanying the self-critical person’s negative thoughts.

Few studies have investigated the origin of a self-critical style and there is little research on the relationship between cognitive (self-criticism) and emotional (shame) vulnerabilities, despite both being theoretically linked to the notion of self-concept which appears to be critical in the development of depressive symptoms. The principal aim of this study is thus to develop a more comprehensive path model of self-criticism and depression. The hypothesised pathways based on the theoretical and empirical literature between the proposed study variables are presented in Figure 1. We were broadly interested in testing the hypothesis that: (i) self-criticism originates from a parental bonding style characterised by low paternal and maternal care and high paternal and maternal control; (ii) self-criticism and shame are mediating variables between parental bonding and depression; and that (iii) shame mediates the relationship between self-criticism and depression. Although direct links between several variables and depression is also possible, the current study focuses only on the proposed pathway model. Partial Least Square (PLS) regression was used to assess the linear relation between variables in this model. The resulting path weights ( ) can be interpreted similarly to path coefficients that are estimates in path-analytic approaches. PLS generates path coefficients for a structural equation modeling (SEM) type model, but without SEM’s data distribution assumptions. It can thus be a powerful method of analysis as it makes minimal demands on measurement scales, sample size, and residual distributions.
Figure 1: Initial hypothesized path model of depression.
Note: M.C = Maternal Care, P.C = Paternal Care, M.P = Maternal Protection, P.P = Paternal Protection, S.C = Self-Criticism, ESS = Experience of Shame Scale, BDI = Beck Depression Inventory.

Method

Participants
The current study is a cross-sectional design that consisted of 201 students (163 women, 38 men) who were enrolled in an undergraduate introductory psychology course at the University of Wollongong. The mean age of the sample was 21.61 years (SD = 7.46), with a range of 17–64 years. All participants received course credit for their participation.

Procedure
Participants were asked to complete a series of questionnaires taking approximately 45 minutes that included measures of demographic characteristics, early environmental experience, cognitive vulnerability to depression, emotional vulnerability to depression, and current depressive symptoms.

Measures

Early Environmental Experience
Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979). The PBI is a 25-item scale, with separate versions for mother and father, and assesses retrospectively the attitudes and behaviors of the parents of the respondent in the first 16 years of their life. The PBI assesses two dimensions: care and overprotection. Responses are indicated on a four-point Likert scale, ranging from “Very like” to “Very unlike”. The care and overprotection scales have been demonstrated to be reliable and valid, and are stable over changes in mood state (Brewin, Andrews, & Gotlib, 1993). In this study, the Cronbach’s Alphas were .92 for maternal care, .87 for maternal overprotection, .94 for paternal care and .86 for paternal overprotection.

Cognitive Vulnerability to Depression
The Depressive Experiences Questionnaire (DEQ; Blatt, D’Afflitti & Quinlan, 1976) is a 66-item questionnaire, rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). It assesses the personality dimensions of self-criticism and dependency, which are thought to confer vulnerability to depression. The DEQ is computer scored in order to assess the factor loadings of items, and the scores derived for each subscale are z scores based on established norms on the whole sample, thus Cronbach alpha is not an appropriate reliability measure. Typical self-criticism items include “There is considerable difference between how I am now and how I would like to be”, “I find it hard to accept my weaknesses”, “Often I find I do not live according to my standards or ideals”. Previous research has found good convergent and discriminant validity for the DEQ (Blaney & Kutcher, 1991). Only the self-criticism factor was examined in this study.

Emotional Vulnerability to Depression
The Experiences of Shame Scale (ESS: Andrews, Qian, & Valentine, 2002) is a 25-item measure that assesses the frequency of shame experiences related to one’s character (“Have you ever felt ashamed of the sort of person you are?”), behavior (“Have you tried to cover up or conceal things you felt ashamed of having done?”), and body (“Have you avoided looking at yourself in the mirror?”). Using a scale from 1 (not at all) to 4 (very much), participants rated the frequency of their shame experiences over the past year. Research has shown the ESS to have good discriminant and construct validity, as well as high test-retest reliability (Andrews et al., 2002). A Cronbach’s Alpha of .94 was found in this study.

Current Depressive Symptoms
The Beck Depression Inventory (Beck, Steer, & Garbin 1988) is a 21-item measure that assesses the affective, cognitive, motivational, and somatic symptoms of depression in the past week that participants rate on a 4-point scale. The BDI has demonstrated high test-retest reliability ($r=.60$ to $r=.86$), internal consistency ($r=.85$), and discriminant validity, while it has also exhibited moderately high convergent validity (Beck et al., 1988).

Results

Preliminary Analyses
Table 1 contains means, standard deviations, range and inter-correlations between maternal and paternal bonding variables (care, overprotection), self-criticism,
shame and depressive symptom variables. The correlations observed were all in the expected directions. Differences in mean scores for men and women were found on two of seven variables. Women ($M = -1.13, SD = 1.00$) scored higher on the DEQ self-criticism than men ($M = 1.7, SD = .98$), $F(1, 199) = .04, p < .05$. Women ($M = 11.91, SD = 8.82$) also scored higher on the BDI than men ($M = 9.19, SD = 6.73$), $F(1, 199) = 5.12, p < .05$.

Table 1: Correlations, Means, and Standard Deviations among Study Variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. M.C</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. P.C</td>
<td>.41</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. M.P</td>
<td>-.39</td>
<td>-.26</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. P.P</td>
<td>-.19</td>
<td>-.31</td>
<td>.45</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. S.C</td>
<td>-.38</td>
<td>-.44</td>
<td>.25</td>
<td>.13</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ESS</td>
<td>-.15</td>
<td>-.28</td>
<td>.26</td>
<td>.13</td>
<td>.61</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>7. BDI</td>
<td>-.25</td>
<td>-.31</td>
<td>.31</td>
<td>.15</td>
<td>.61</td>
<td>.60</td>
<td>1.0</td>
</tr>
<tr>
<td>Mean</td>
<td>28.6</td>
<td>24.0</td>
<td>13.6</td>
<td>10.9</td>
<td>-.07</td>
<td>60.2</td>
<td>11.3</td>
</tr>
<tr>
<td>SD</td>
<td>7.53</td>
<td>9.13</td>
<td>7.67</td>
<td>7.20</td>
<td>1.01</td>
<td>15.1</td>
<td>8.49</td>
</tr>
<tr>
<td>Range</td>
<td>4-36</td>
<td>0-36</td>
<td>0-37</td>
<td>0-33</td>
<td>-2.8</td>
<td>29-</td>
<td>2.6</td>
</tr>
</tbody>
</table>

**Note.** Bold text indicates $p < .01$ (2-tailed). Normal text indicates $p < .05$ (2-tailed). M.C = Maternal Care, P.C = Paternal Care, M.P = Maternal Protection, P.P = Paternal Protection, S.C = Self-Criticism, ESS = Experience of Shame Scale, BDI = Beck Depression Inventory.

**Path Analysis**

Based on the results of analyses using the initial model, all pathways met statistical significance at the .05 level with the exception of paternal and maternal protection. Figure 2 presents the final optimal model, which was trimmed to include only those manifest variables loading significantly on the latent variable constructs. Results indicated that paternal care ($PW = -.343$) and maternal care ($PW = -.201$) significantly predicted level of self-criticism, which then predicted frequency of shame experiences ($PW = .623$). In turn, frequencies of shame experiences significantly predicted the level of depressive symptoms ($PW = .585$).

**Discussion**

The primary purpose of this study was to explore a more comprehensive psychological path model of depression that integrates parental bonding, self-criticism and shame as factors influencing current mood functioning. The model put forward proposed that self-criticism originates from a parental bonding style characterised by low parental warmth and high parental control, with self-criticism and shame representing mediating variables between parental bonding and depression. The evaluation of the measurement model utilising PLS regression in part supported the combination of the proposed variables. Specifically, the final path model suggested that a parental bonding characterised by a lack of warmth correlates with level of self-critical cognitions, influencing the frequency of shame experiences, which in turn affect level of depressive symptoms. This model presents a theoretical and empirically supported conceptual representation of one psychological chain that contributes to the experience of depressive symptoms.

These findings have important implications. First, they are consistent with the broader framework proposed by Blatt and Homann (1992), signifying parental behavior and relationships with parents as important in the development of self-criticism. However, contrary to the empirical and theoretical literature (e.g. Amitay et al., 2008; McCranie & Bass, 1984) only lack of parental warmth, not high parental control, significantly predicted level of self-critical cognitions. It may be that parental control appears less representative among a nonclinical population, yet proves a more important variable in a clinical population. Parental control may exhibit a particular negative influence, compounding the negative effect of lack of parental warmth (Parker, 1982), effectively increasing the vulnerability to depression.

Second, the results further support the importance of both self-criticism and shame as mediating factors between early parent-child experience and depressive symptoms. In addition, the final path model suggests that high levels of self-critical cognitions result in accompanying profound shame which mediate the relationship between self-criticism and depression. This
finding is in accordance with Ashby et al., (2006) and highlights the important role of emotional experience anchored to self-critical cognition in pathways to depressive symptoms.

Overall, this study supports a psychological model of self-critical or introjective depression, as originating outside the self and internalised in the process of crucial early relationships with parents (Blatt & Homann, 1992). However, the study further supports that what has been internalised is not only the cognitive critical content but also its emotional tone. The current study provides support that core self-critical beliefs are emotionally-anchored and that it is as much the person’s response to negative cognitions and their inability to cope with the self-criticism, than the cognitions and criticisms alone, that lead to depression (Greenberg et al., 1990).

The present results should be interpreted in light of a number of limitations. First of all, this study was cross-sectional and consisted of a predominantly young nonclinical female sample. Second, this study relied exclusively on retrospective self-report measures of parenting that may be biased by the participant’s current mood. It should further be noted that our model was not intended to predict major depressive disorder but instead was used to predict depressive symptom severity on the BDI in a nonclinical sample. In future studies, research should use longitudinal designs, incorporate additional measures, such as diagnostic interviews in a clinical sample, using a more diverse sample in terms of age, sex and occupation to test this model fully and to extend it to other populations. This model, however, represents an important extension of the relationship between self-criticism and depression and enhances the understanding of these complex phenomena.

This study highlights important psychological factors in the pathway to depression that help in the understanding of vulnerability to depressive symptoms in a nonclinical population who may be susceptible to the emergence of clinical depression. These factors may also be important to consider in therapy as they may represent maintaining factors within a cognitive-behavioural therapy approach. Indeed, to help self-critical patients internalise positive beliefs about themselves, it may be important to explore how negative cognition has originated in early parental interaction and how accompanying emotional processes have impacted these thoughts.

References


It is the policy of The Australian Psychological Society Limited to own the copyright to its publications, and the contributions contained therein in order to protect the interests of the Society and its authors, and to facilitate the appropriate re-use of this material by others. Transfer of Copyright is thus a requirement to publish a referee manuscript in any publication of The Australian Psychological Society Limited. Authors who have transferred Copyright of a particular manuscript to The Australian Psychological Society Limited will still be able to reproduce the manuscript for their personal use provided copies are not offered for sale.

© The Australian Psychological Society Ltd
Editors’ Note and Acknowledgements

We are delighted to present the Proceedings of the 44th Australian Psychological Society's (APS) Annual Conference, September 30 – October 4, 2009, and thank all contributors for the high caliber papers which were submitted. The contributions cover a very wide range of topics in psychology and it is pleasing to note the diversity of Australian research which is reflected in this publication.

We would also like to take this opportunity to thank the many members who agreed to act as reviewers for the Proceedings submissions. All papers were subject to independent peer review by two reviewers and, where necessary, by a third reviewer. The Society appreciates the heavy load which many reviewers shouldered to complete the reviews in a rigorous and timely fashion and for this we offer our sincere thanks.

These Proceedings are published in 2009 and are available for purchase at the 44th APS Annual Conference in Darwin and from the APS National Office in Melbourne.

A special thank you is recorded here to Laura Sciacchitano and Athena Politis who assisted with the administration, production and editing of this publication.

Nicholas Voudouris PhD MAPS & Vicky Mrowinski Assoc MAPS

Proceedings of the 44th APS Annual Conference Reviewers:
Jacky Cranney
Gerry Fogarty
Otmar Lipp
Anthony Love
Maria Kangas
Kate Moore
Mary Morris
Vicky Mrowinski
Janette Perz
Athena Politis
Laura Sciacchitano
Graham Tyson
Nicholas Voudouris
# Table of Contents

Cognitive Complexity and Aggressive Responding in a Simulated Social Interaction  
*Eugene V. Aidman*  
1 - 6

The 1-2-3 Magic Program: An Evaluation of a Brief Psychoeducational Parenting Program  
*Erin L. Bailey, Rick van der Zwan, Thomas W. Phelan & Anna Brooks*  
7 - 12

Temperamental Vulnerability to Bipolar Disorder: One or Two Dimensions?  
*Ben Bullock & Greg Murray*  
13 - 18

The Relationships between Personality, Learning Approaches, Satisfaction with Student Support Services, and Academic Success  
*Lorelle J. Burton & Roslyn A. Ballantine*  
19 - 24

Attachment, Body Image Disatisfaction, Body Change Strategies, and Self Esteem in a University Sample  
*Marie L. Callabiano & Johanna Van Grinsven*  
25 - 29

An Investigation of the Developmental Trajectory of Key Markers of the Disgust Emotional Response and the Moral-Disgust Category of Disgust Trigger  
*Neelu Chadda*  
30 - 35

The Influence of Fatigue and Mood on Cognitive Failures  
*Stephen Chaney & Gerard J. Fogarty*  
36 - 40

The Psychological and Genetic Correlates of the Bipolar Affective Trait  
*James D. Collett, Enzo A. Palombo & Greg Murray*  
41 - 45

Measuring Modality Preference  
*David Cottrell & Louise Hansen*  
46 - 50

The Problem of Fatigue in People with Neurotrauma  
*Ashley Craig, Yvonne Tran, Nirupama Wijesuriya & James Middleton*  
51 - 55

How does having a Partner Effect the Experience of the Work-Life Interface for Mothers: Self-Efficacy, Coping and Support  
*Barry J. Fallon & Mary Anglicas*  
56 - 61

The Social Benefits of Computer Games  
*Paul Fong & Peter M. Forster*  
62 - 65

Influence of Knowledge about Genetic Predisposition to Type II Diabetes on Health Intentions: A Modified Theory of Planned Behaviour  
*Ingrid Hawkins & Graham Davidson*  
66 - 70

Sensitivity of the Word-Stem Completion Task as a Measure of Auditory Perceptual Priming in Children Undergoing Surgery with General Anaesthesia  
*Rachel Hutchens, Robyn Stargatt & Andrew J. Davidson*  
71 - 75

Enablers and Barriers to Binge Drinking in Young Adults  
*Mary Katsikitis, Dixie Statham, Jamilla Rosdahl & John Lowe*  
76 - 80
Incongruence between Implicit and Self-Attributed Affiliation Motives, and Life Satisfaction: The Moderating Role of Pure-Hearted Principles
Janice Langan - Fox, Michael J. Sankey & James M. Canty

Evaluation of a Group-Based Cognitive Behavioural Therapy Program for Children with Anxiety Disorders and the Role of Control Beliefs
Kim Lehmann & Kingsley Tonkin

Male Help Seeking for Body Image Concerns
Vivienne Lewis & Rosy Bola

Chinese International Students' English Proficiency, Social Interactions with Locals, and Satisfaction with Life in Australia
Anita S. Mak

The Influence of Age, Gender and Context on Moral Reasoning: Judgements and Justifications about Abortion
Mary M. McGeoch & Rivka Witenberg

Identification and Treatment of Depressed Mood in People with Mild Intellectual Disability: Findings from a Series of Studies
Jane A. McGillivray & Marita P. McCabe

Mapping the Linear Relationships Among Stressors, Mediators and Coping
David J. Mellor, Kathleen A. Moore & Zhong Ming Siong

Social Support in Rehabilitation: Theory, Measures and Contribution to Outcomes
Gregory Murphy & Mervyn Jackson

Biological Rhythms and Vulnerability to Bipolar Disorder: Daily Activity Rhythms and Social Rhythms are Attenuated in High Risk Healthy Young Adults
Greg Murray, Ben Bullock & Eus van Someren

Parental Bonding and Religiosity as Predictors of Dispositional Forgiveness
Nola L. Passmore, Vivienne C. Rea, Bronwyn T. Fogarty & Pualani M.L. Zelakiewicz

Parenting Practices and the Development of Executive Function and Theory of Mind in 3- to 5-year-old Singaporean Children
Li Qu, See Leng Koh, Jing Hang Wu, Xue Lin Charlene Hon & Jing Xuan Ng

Male Depression: The Impact of Masculine Role Norms
Simon M. Rice & Barry J. Fallon

University Students' Alcohol Consumption: Combined Influence of Parents and Peers
Rachel M. Roberts, Johanna Wilkinson & David Watts

Women's Experience of Body Image, Self and Quality of Life
Patricia Rodwell & Nerina J. Caltabiano

The Relation of Early Environmental Experience to Shame and Self-Criticism: Psychological Pathways to Depression
Karin G.E. Sandquist, Brin F.S. Grenyer & Peter Caputi

Measuring Women's Attitudes to Building a Career
Paul Smith, Nadia Crittenden & Peter Caputi
Working Relationships in the Australian Army: Applying a Social Capital Framework to Social Information Networks  
*Christina F. Stothard & Maya Drobnjak*  
173 - 178

Adherence and Beliefs of Prescribed Medication in the Aboriginal and Non Aboriginal Elderly Population in the Top End  
*Hemangi Surti & Pascale Dettwiller*  
179 - 184

What do People with Spinal Cord Injury Value Most: Priorities as a Function of Self Efficacy  
*Yvonne Tran, Ashley Craig, Nirupama Wijesuriya & James Middleton*  
185 – 189

The Effects of Reason and Event Saliency on Health Related Decisions  
*Lisa Woods & Amy Y. C. Chan*  
190 – 195

Is the Consideration of Better and Worse Alternatives to Reality Advantageous to Mood After a Positive Outcome?  
*Rebecca Zuchetti & Amy Y.C. Chan*  
196 – 201