



This is a repository copy of *Perfectionism and maladaptive coping styles in patients with chronic fatigue syndrome, irritable bowel syndrome and fibromyalgia/arthritis and in healthy controls.*

White Rose Research Online URL for this paper:  
<http://eprints.whiterose.ac.uk/91790/>

Version: Accepted Version

---

**Article:**

Sirois, F.M. and Molnar, D.S. (2014) Perfectionism and maladaptive coping styles in patients with chronic fatigue syndrome, irritable bowel syndrome and fibromyalgia/arthritis and in healthy controls. *Psychotherapy and Psychosomatics*, 83 (6). 384 - 385. ISSN 0033-3190

<https://doi.org/10.1159/000365174>

---

**Reuse**

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

Running head: PERFECTIONISM, COPING, AND CFS

**Please cite as:**

Sirois, F. M. (2014). Looking beyond the barriers: Practical and symbolic factors associated with disclosure of complementary and alternative medicine (CAM) use. *European Journal of Integrative Medicine*, 6(5), 545-551. doi:[10.1016/j.eujim.2014.04.002](https://doi.org/10.1016/j.eujim.2014.04.002)

Perfectionism and Maladaptive Coping Styles in Chronic Fatigue Syndrome, Irritable Bowel Syndrome, Fibromyalgia/Arthritis and Healthy Controls

Fuschia M. Sirois, Ph.D.<sup>1,2</sup>

Danielle S. Molnar, Ph.D.<sup>3</sup>

<sup>1</sup>Health and Well-being Laboratory, Department of Psychology, Bishop's University

<sup>2</sup>Centre for Research on Aging, Sherbrooke, Quebec, Canada

<sup>3</sup>Department of Psychology, Brock University

Correspondence concerning this article should be addressed to Fuschia M. Sirois, PhD,  
Department of Psychology, University of Sheffield, 309 Western Bank, Sheffield, S10 2TP,  
United Kingdom. Email: [f.sirois@sheffield.ac.uk](mailto:f.sirois@sheffield.ac.uk)

Biopsychosocial models of chronic fatigue syndrome (CFS) posit that personality and stress have predisposing and perpetuating roles in the persistent and unexplained fatigue that characterizes this functional somatic syndrome [1]. Studies indicate that many CFS patients are characterized by an achievement-oriented and perfectionistic personality, and that such tendencies coupled with self-criticism drives these individuals to work beyond the point of exhaustion in a way that may initiate or perpetuate chronic fatigue [2]. Research has differentiated between the role of holding high personal standards (standards perfectionism) and having self-critical thoughts about trying to achieve ideal standards (maladaptive perfectionism) in CFS [2]. The latter has been linked to poor outcomes including heightened stress sensitivity [3]. Although research indicates that CFS patients use maladaptive coping strategies more than healthy controls [4], it is unknown whether this is true relative to other chronic illness groups. Because maladaptive perfectionism is linked to poor coping responses [5], we examined perfectionism dimensions and maladaptive coping styles in CFS patients compared to healthy controls and two other chronic illness groups.

Participants were drawn from a larger sample of community-dwelling adults from the United States or Canada ( $N = 980$ ) who completed an anonymous online survey on personality and health after providing informed consent. We selected individuals who indicated on a medical checklist that included 13 different chronic health conditions that they had been diagnosed by a medical professional with CFS, irritable bowel syndrome (IBS), or fibromyalgia/arthritis for three subsamples. Remaining participants were screened for the presence of other chronic diseases, leaving a final healthy sample of 564 which was divided into 6 random samples of comparable size to the illness groups, one of which was randomly chosen as the healthy control group.

The Brief COPE [6], a 28-item self-report measure of 14 different coping styles, assessed four maladaptive coping strategies: behavioral disengagement, substance use disengagement, denial, and self-blame. The Revised Almost Perfect Scale [7] assessed maladaptive perfectionism (12 items; e.g., “My best just never seems to be good enough for me“) and standards perfectionism (7 items, e.g., “I set very high standards for myself). Analysis of variance (ANOVA) compared groups on the test variables controlling for demographics where appropriate. All significance tests were two tailed with the level of significance set at  $p < 0.05$ .

Regarding demographics, the samples only differed on age. The CFS and healthy controls were not significantly different in age. However, the CFS group was significantly younger than the IBS ( $t(324) = -3.07, p < .01$ ) and the FM/arthritis groups ( $t(324) = -3.38, p < .01$ ). The ANCOVAs found that maladaptive, but not standards perfectionism levels differed significantly between the groups (see Table 1). Planned pairwise comparisons revealed that maladaptive perfectionism was significantly higher in the CFS group compared to the healthy controls (Mean difference [95% CI]:  $-.71 [.29 - 1.13], p < .01, d = .53$ ), IBS group ( $-.53 [.09 - .97], p < .05, d = .37$ ), and the FM/arthritis group ( $-.63 [.17 - 1.09], p < .01, d = .49$ ). There were no other significant differences on perfectionism. Regarding coping strategies, the CFS group scored higher on behavioral disengagement coping compared to the healthy controls ( $-.34 [.11 - .57], p < .01, d = .44$ ), and the arthritis/FM group ( $-.35 [.09 - .60], p < .01, d = .48$ ). Parallel differences were found for self-blame coping with the healthy controls ( $-.40 [.13 - .66], p < .01, d = .45$ ), and the arthritis/FM group ( $-.28 [.01 - .57], p = .05, d = .33$ ).

The correlations between perfectionism types and the two coping strategies were computed for the CFS group and the healthy controls. Maladaptive perfectionism was significantly correlated with self-blame coping in the CFS group ( $r = .56, p < .01$ ) and the

healthy controls ( $r = .30, p < .01$ ). A Fisher's  $z$  test revealed that the magnitude of this correlation was significantly larger for CFS ( $z = 2.11, p < .05$ ). The correlation between maladaptive perfectionism and behavioral disengagement coping was also significant for the CFS group ( $r = .35, p < .01$ ) and the healthy controls ( $r = .30, p < .01$ ). However, these correlations did not differ significantly ( $z = 0.36, p = .72$ ). Standards perfectionism was not significantly correlated with self-blame coping in the CFS group ( $r = .12$ ), but was negatively correlated in the healthy controls ( $r = -.44, p < .01$ ). The magnitude of these correlations significantly differed ( $z = 3.81, p < .01$ ). The correlations with behavioral disengagement coping were negative in the CFS ( $r = -.27, p < .01$ ) and healthy controls ( $r = -.44, p < .01$ ), but not significantly different ( $z = 1.26, p = .10$ ). In the IBS group, maladaptive perfectionism was significantly correlated with each of the four maladaptive coping styles ( $r$ 's from .34 to .64,  $p < .01$ ), whereas standards perfectionism negatively correlated with denial ( $r = -.25, p < .05$ ) and behavioral disengagement ( $r = -.32, p < .01$ ). In the arthritis/fibromyalgia group, maladaptive perfectionism was significantly correlated with all but substance use coping ( $r$ 's from .32 to .43,  $p < .01$ ); standards perfectionism was not significantly correlated with any of the coping strategies.

This study builds on previous work indicating that CFS is associated with the use of maladaptive coping strategies compared to healthy controls [4], by also finding that individuals with CFS used two maladaptive coping strategies – behavioral disengagement and self-blame coping – to a greater extent than healthy controls and people with FM/arthritis, but not people with IBS. Similar to research noting elevated levels of perfectionism in CFS [2], we found that maladaptive perfectionism was highest among those with CFS relative to the other groups. Importantly, maladaptive perfectionism was significantly correlated with maladaptive coping in

the CFS, IBS, arthritis/FM groups and healthy controls, but more so in CFS for self-blame coping, which is consistent with previous research underscoring the importance of self-critical perfectionism in CFS [4]. This suggests that maladaptive perfectionism promotes self-critical thoughts that fuel a tendency to cope with stress by becoming consumed with self-blame rather than taking constructive action, a tendency that may be pronounced in the context of CFS [3], and that contributes to the prolonged chronic stress and subsequent allostatic crash posited by some researchers [8]. That maladaptive perfectionism was associated with disengagement coping in the CFS group highlights the role of perfectionism in interfering with the completion of important illness management tasks and goals that may be viewed as too stressful. That maladaptive perfectionism was also associated with maladaptive coping in IBS and arthritis/FM is consistent with research indicating that maladaptive perfectionism is a vulnerability factor for other chronic pain conditions [9].

The cross-sectional design of the study precludes answering the extent to which perfectionism and coping are causes or consequences of CFS. Future research examining these issues longitudinally and with larger, medically-screened samples is needed to clarify the findings from this preliminary study. Sampling from the general population rather than from primary or tertiary care suggests that the findings can be generalized beyond patients with CFS who seek medical care. Although random sampling a healthy control group from the larger sample increased generalizability, the small sample sizes of the groups likely decreased power to detect differences.

Nonetheless, our findings have implications for treatment approaches. There is some evidence that cognitive behavioral interventions that target perfectionism [10] may help enhance the coping capacities of people with CFS.

### **Acknowledgements**

The data collection was supported by a research grant (# 410-2005-0094) from the Social Sciences and Humanities Research Council (Canada) awarded to the first author. Preparation of this paper was supported by funding from the Canada Research Chairs program awarded to the first author.

## References

- [1] Harvey S, Wessely S. Chronic fatigue syndrome: identifying zebras amongst the horses. *BMC Med* 2009;7:58.
- [2] Kempke S, Van Houdenhove B, Luyten P, Goossens L, Bekaert P, Van Wambeke P. Unraveling the role of perfectionism in chronic fatigue syndrome: Is there a distinction between adaptive and maladaptive perfectionism? *Psychiatry Res* 2011;186:373-7.
- [3] Luyten P, Kempke S, Van Wambeke P, Claes S, Blatt SJ, Van Houdenhove B. Self-critical perfectionism, stress generation, and stress sensitivity in patients with Chronic Fatigue Syndrome: Relationship with severity of depression. *Psychiatry* 2011;74:21-30.
- [4] Nater UM, Maloney E, Lin JMS, Heim C, Reeves WC. Coping styles in chronic fatigue syndrome: Findings from a population-based study. *Psychother Psychosom* 2012;81:127-9.
- [5] Flett GL, Baricza C, Gupta A, Hewitt PL, Endler NS. Perfectionism, psychosocial impact and coping with irritable bowel disease: A study of patients with crohn's disease and ulcerative colitis. *J Health Psychol* 2011;16:561-71.
- [6] Carver CS. You want to measure coping but your protocol's too long: Consider the Brief COPE. *Int J Behav Med* 1997;4:92-100.
- [7] Slaney RB, Rice KG, Mobley MT, J., Ashby JS. The revised almost perfect scale. *Meas Eval Couns Dev* 2001;34:130-45.
- [8] Van Houdenhove B, Eede FVD, Luyten P. Does hypothalamic–pituitary–adrenal axis hypofunction in chronic fatigue syndrome reflect a ‘crash’ in the stress system? *Med Hypotheses* 2009;72:701-5.
- [9] Kempke S, Luyten P, Van Wambeke P, Coppens E, Morlion B. Self-critical perfectionism predicts outcome in multidisciplinary treatment for chronic pain. 2014;14:309-14.



[10] Flett GL, Hewitt PL. Treatment interventions for perfectionism—A cognitive perspective: Introduction to the special issue. *J Rat-Emo Cognitive-Behav Ther* 2008;26:127-33.

Table 1.

Perfectionism and coping strategies in CFS, IBS, FM/arthritis, and well controls.

Test variables	Mean scores (95% CI)				F(3,324)	<i>p</i> value	Effect size Partial $\eta^2$
	CFS ( <i>n</i> = 79)	IBS ( <i>n</i> = 85)	FM/arthritis ( <i>n</i> = 70)	Well controls ( <i>n</i> = 94)			
Age	32.8 (30.5 – 35.0)	37.5 (35.4 – 39.7)	38.9 (36.1 – 41.6)	31.1 (29.4 – 32.7)	11.68	.000	0.10
Maladaptive perfectionism	4.53 (4.2-4.8)	4.00 (3.7-4.2)	3.90 (3.6-4.2)	3.82 (3.5-4.1)	4.22	.006	0.04
Standards perfectionism	5.41 (5.2-5.7)	5.58 (5.3-5.8)	5.36 (5.1-5.6)	5.45 (5.2-5.7)	0.49	.689	0.01
Behavioural disengagement	1.90 (1.7-2.1)	1.74 (1.6-1.9)	1.55 (1.4-1.7)	1.56 (1.4-1.7)	3.69	.012	0.03
Substance disengagement	1.54 (1.4-1.7)	1.58 (1.4-1.7)	1.47 (1.3-1.7)	1.3 (1.1-1.4)	2.43	.065	0.02
Denial	1.68 (1.5-1.8)	1.56 (1.4-1.7)	1.45 (1.3-1.6)	1.45 (1.3-1.6)	1.66	.176	0.02
Self-blame	2.71 (2.5-2.9)	2.62 (2.4-2.8)	2.43 (2.2-2.6)	2.31 (2.1-2.5)	3.62	.014	0.03

All analyses, except for age, controlled for age, sex, and education level. Effect size is for the variable groups.

