Characteristics and Utility of the Body Compassion Scale

Jennifer K. Altman, M.A.[1], Abbie O. Beacham, Ph.D.[2], Kenneth Linfield, Ph.D.[3], & Paul G. Salmon, Ph.D.[1]

[1] University of Louisville, Louisville, KY; [2] Xavier University, Cincinnati, OH; [3]Spalding University, Louisville, KY

INTRODUCTION

Individuals with negative body image are more likely to experience mood disorders, eating disorders, social isolation, engage in risky sexual behaviors, and avoid participation in positive health behaviors such as physical activity and health care appointments[1-5].Treatment of body image-related disturbances has strong empirical support in cognitive behavioral therapies (CBT), including the newer mindfulness and acceptance oriented variants[6-15]. These mindfulness and acceptance-based approaches have adapted existing CBT intervention protocols for body and body image-related disturbances (e.g., body dissatisfaction, eating disorders, chronic pain and illness) with promising results.

Mindfulness and acceptance-based interventions emphasize increasing awareness and acceptance of thoughts, sensations and experiences. As these interventions evolve, corresponding valid and reliable assessment measures must also be developed and evaluated. In an effort to bridge the somewhat disparate foundations of the constructs of body image[16-17] (grounded in the cognitive model) and self-compassion[18] (grounded in Buddhist psychology), we propose a new construct –"body compassion"– which provides a conceptualization of body-related disturbances and well-being compatible with mindfulness and acceptance-based approaches.

The Body Compassion Scale (BCS) was developed to assess this construct. Theoretically based items (N=83) were developed from our definition of body compassion, 'the regarding of one's own body, in appearance, competence and health, with mindfulness, kindness and awareness of common humanity'. From an initial item pool, the BCS was developed using exploratory factor analysis which yielded 23 total items and three factors: Defusion, Acceptance, and Common Humanity (Alphas=.88-.91). Herein, we present predictive validity of the BCS specific to eating disordered behaviors assessed by the Eating Attitudes Test (EAT-26), in concert with other measures including the Self-Compassion Scale-sf (SCS-sf) and Five Facet Mindfulness Questionnaire (FFMQ).

METHOD

Participants and Procedure:
Participants were undergraduates (N=255) at a Midwestern University (72.1% female; 81.4% White; 8.5% Black; 4.3% Asian; 2.7% Hispanic; Mage = 20.24; MBMI = 24.26). Participants completed a battery of questionnaires which included demographic/ health questions, the BCS, the EAT-26, the SCS-sf and the FFMQ-sf. The battery of questionnaires was administered online via Survey Monkey. Participants were recruited through general psychology course research participant pools.

Measures:

Body Compassion Scale (BCS). A newly developed 23-item scale with three factors (Defusion, Common Humanity, Acceptance) with internal consistencies of .90, .91, and .88 respectively. Participants are instructed to indicate how often they believe or behave in the stated manner on each of the items on a scale of 1 (almost never) to 5 (almost always).

Eating Attitudes Test (EAT-26)[19]**.**The EAT-26 is a 26-item measure used to assess disordered eating behavior.

Self-Compassion Scale – short form (SCS-sf)[20]. A 12-item measure which has a near perfect correlation with the long Self-Compassion scale in the measurement of the three components as operationalized by Neff[18], 1) kindness toward oneself (versus judgment); 2) seeing one's experiences as part of the common humanity (versus isolation); and 3) mindfulness (versus over-identification).

Five Facet Mindfulness Questionnaire-sf (FFMQ-sf)[21]. A 24-item measure consisting of five subscales (observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience). The FFMQ-SF has shown adequate to good content validity and internal consistency of all five facets (α range = .75-.87). A total score can also be derived from the FFMQ-SF, which is a sum of all of the items[22].

Table 2. Factor structure of 23 BCS items

	Factor Loading 1	2	3
Factor 1: Defusion			
When I feel frustrated with my body's inability to do something, I tend to feel separate and cut off from other people.	**.734**	.146	.188
When I think about my body's inadequacies, it tends to make me feel more separate and cut off from other people.	**.731**	.139	.299
When I fail at some form of physical activity that's important to me, I tend to feel alone in my failure.	**.729**	.140	.056
When my body fails at something important to me I become consumed by feelings of inadequacy.	**.705**	.147	.203
When my body isn't responding the way I want it to, I tend to be tough on myself.	**.678**	.127	.235
When I wish some aspect of my body looked different, it feels like no one else understands my struggle.	**.663**	.141	.192
When I have physical symptoms, illness or injury, it tends to make me feel more separate and cut off from other people.	**.652**	.107	-.012
When I notice aspects of my body that I don't like, I get down on myself.	**.623**	.066	.537
When I'm feeling physically uncomfortable I tend to obsess and fixate on everything that's wrong.	**.620**	.061	.212
Factor 2: Common Humanity			
When I am frustrated with some aspect of my appearance, I try to remind myself most people feel this way at some time.	.036	**.804**	.175
When I doubt my ability to do a new physical activity, I try to remind myself that most people also feel this way at some point.	.085	**.763**	.060
When I feel out of shape, I try to remind myself that most people feel this way at some point.	.116	**.758**	.026
I try to see my body's failings as something everyone experiences in one way or another.	.163	**.755**	.114
When I'm injured, ill or have physical symptoms, I remind myself that there are lots of other people in the world feeling like I am.	.056	**.749**	-.013
When I feel frustrated with my body's inability to do something, I try to remind myself that most people in my condition feel this way at some point.	.016	**.715**	.206
When I feel my body is inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	.026	**.707**	.169
When I am at my lowest during times of physical symptoms, illness or injury, I know I am not alone in feeling this way.	.222	**.693**	.019
When I'm concerned if people would consider me good-looking, I remind myself that most everyone has the same concern.	-.003	**.611**	.243
Factor 3: Acceptance			
I am accepting of my looks just the way they are.	.386	.221	**.720**
I am accepting of the way I look without my clothes on.	.351	.138	**.711**
I feel okay in my body.	.418	.226	**.680**
I'm tolerant of my body's flaws and inadequacies.	.337	.248	**.671**
I am tolerant of the way my clothes fit me.	.247	.138	**.607**

RESULTS & DISCUSSION

Stepwise regressions identified predictors of eating disorder characteristics, assessed by the EAT-26. Independent variables included in the regression were the SCS-sf, the FFMQ subscales (Observe, Describe, Non-judge, Non-react, Act with Awareness), and the BCS factors. See Table 1.

Controlling for Negative Affect (β=.174, p=.013), in predicting eating disorder symptomatology, the final model accounted for approximately one-third of the total variance ($F(4,190)=23.79$, $p<.0001$, Adj $R^2=.320$) with Body Compassion subscales Defusion (β=-.348, p<.001) and Acceptance (β=-.209, p=.006), as well as the FFMQ Describe subscale (β=.141, p=.027) retained in the model.

These findings represent a first step in exploring the utility of the BCS in applied clinical research, and provide a preliminary empirical base for future research. Body compassion is an emerging construct that may inform our understanding of the experience of embodiment and how individuals relate to their bodies in health and illness. One explicit goal of the formation of the BCS was to reflect the two theoretical constructs from which it was derived. Notably, items retained for the three BCS subscales included items that were originally thought to comprise elements of both self-compassion and body image. Of further note, in the present findings predicting important health behavior indicators such as eating disorder symptomatology, two of the three body compassion factors were retained in the final model, while self-compassion was not. This suggests the specific focus of the BCS on the body is tapping into how individuals relate to their body's beyond the more general focus of self-compassion.

The ultimate utility of the BCS will be its ability to predict outcomes and guide interventions for health and health-related behavior change beyond what has been previously demonstrated via other constructs such as self-compassion[23] and body image flexibility[24]. We believe that body compassion has widespread applicability in populations ranging from persons with chronic illness to fitness related application in apparently healthy persons and athletes. The evaluation of the use of body compassion with mindfulness and acceptance-based interventions is the penultimate goal of this area of inquiry.

REFERENCES

1. Jackson, K. L., Janssen, I., Appelhans, B. M., Kazlauskaite, R., Karavolos, K., Dugan, S. A., Avery, E. A., Shipp-Johnson, K. J., Powell, L. H., & Kravitz, H. M. (2014). Body image satisfaction and depression in midlife women: The Study of Women's Health Across the Nation (SWAN). *Archives of Women's Mental Health, 17*, 177-187. doi: 10.1007/s00737-014-0416-9
2. Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128,* 825-848.
3. Cash, T. F., Theriault, J., & Annis, N. M. (2004). Body image in an interpersonal context: Adult attachment, fear of intimacy, and social anxiety. *Journal of Social and Clinical Psychology, 23,* 89-103.
4. Woertman, L., & van den Brink, F. (2012). Body image and female sexual functioning and behavior: A review. *Journal of Sex Research*, *49*(2-3), 184-211.
5. Vartanian, L. R., & Novak, S. A. (2011). Internalized societal attitudes moderate the impact of weight stigma on avoidance of exercise. *Obesity*, *19*(4), 757-762.
6. Cash, T. F. (2011). Cognitive-behavioral perspectives on body image. In T. F. Cash & L. Smolak (Eds.), *Body Image: A handbook of science, practice, and prevention* (pp. 39-47). New York: Guilford Press.
7. Cash, T. F., & Hrabosky, J. I. (2003). The effects of psychoeducation and self-monitoring in a cognitive-behavioral program for body-image improvement. *Eating Disorders: The Journal of Treatment and Prevention, 11,* 209-225.
8. Cash, T. F., & Lavallee, D. M. (1997). Cognitive-behavioral body-image therapy: Further evidence of the efficacy of a self-directed program. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 15,* 281-294.
9. Jarry, J. L. & Cash, T. F. (2011). Cognitive-behavioral approaches to body image change. *In T. F. Cash & L. Smolak (Eds.), Body image: A handbook of science, practice, and prevention, 2nd Edition (pp. 415-423).* New York, NY: Guilford Press.
10. Nye, S., & Cash, T. F. (2006). Outcomes of manualized cognitive-behavioral body image therapy with eating disordered women treated in a private clinical practice. *Eating Disorders: The Journal of Treatment and Prevention, 14,* 31-40.
11. Strachan, M. D., & Cash, T. F. (2002). Self-help for a negative body image: A comparison of components of a cognitive-behavioral program. *Behavior Therapy, 33*, 235-251.
12. Pearson, A. N., Follette, V. M., & Hayes, S. C. (2012). A pilot study of Acceptance and Commitment Therapy as a workshop intervention for body dissatisfaction and disordered eating. *Cognitive and Behavioral Practice, 19,* 181-197.
13. Alberts, H. J. E. M., Thewissen, R., & Raes, L. (2012). Dealing with problematic eating behavior: The effects of a mindfulness-based intervention on eating behavior, food cravings, dichotomous thinking and body image concern. *Appetite, 58*(3), 847-851.
14. Katterman, S. N., Kleinman, B. M., Hood, M. M., Nackers, L. M., & Corsica, J. A. (2014). Mindfulness meditation as an intervention for binge eating, emotional eating, and weight loss: A systematic review. *Eating behaviors*, *15*(2), 197-204. Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85–102.
15. Telch, C. F., Agras, W. S., & Linehan, M. M. (2001). Dialectical behavior therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology, 69*(6), 1061-1065.
16. Cash, T. F., & Pruzinsky, T. (Eds.) (1990). Body images: Development, deviance, and change. New York: Guilford Press.
17. Cash, T. F. (2004) Body image: Past, present, and future (editorial). *Body Image: An International Journal*, 1, 1-5.
18. Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85–102.
19. Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E, (1982). The eating attitudes test: Psychometric features and clinical correlates. *Psychological Medicine,* 12, 871-878.
20. Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology & Psychotherapy. 18,* 250-255.
21. Bohlmeijer, E., Peter, M., Fledderus, M., Veehof, M., & Baer, R. (2011). Psychometric properties of the Five Facet Mindfulness Questionnaire in depressed adults and development of a short form. *Assessment*, 1073191111408231.
22. Van Dam, N. T., Earleywine, M., & Danoff-Burg, S. (2009). Differential item function across meditators and non-meditators on the Five Facet Mindfulness Questionnaire. *Personality and Individual Differences*, *47*(5), 516-521.
23. Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250.
24. Sandoz, E. K., Wilson, K. G., Merwin, R. M., & Kellum, K. K. (2013). Assessment of body image flexibility: the body image-acceptance and action questionnaire. *Journal of Contextual Behavioral Science*, *2*(1), 39-48.

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