The Role of Self-Compassion in Functioning Among those with Chronic Pain

Karlyn A. Edwards[1], Melissa P. Pielech[1], Eric S. Kruger[1], C. Graham Ford[1], & Kevin E. Vowles[1]

[1]Department of Psychology, University of New Mexico, USA

Introduction

Self-compassion is described as extending compassion to one's self in instances of perceived inadequacy, failure, or general suffering. It is often composed of three main components: self-kindness, common humanity, and mindfulness.

Self-compassion is associated with:

- Improved health outcomes
- Fewer symptoms of depression and anxiety
- Higher utilization of healthy coping mechanisms
- Higher overall wellbeing
- Lower psychological distress
- Lower rates of substance use

Limitations of current research:

- Little is known about the role of self-compassion in functioning among those with chronic pain

Aim

- Determine if self-compassion may play a role in several measures of functioning in a treatment seeking sample with chronic pain.

Methods

Survey was administered at baseline upon entering a research study examining the effectiveness of a 4-week outpatient inter-disciplinary pain program.

Measures

- Self-Compassion Scale (SCS)
- Chronic Pain Acceptance Questionnaire (CPAQ)
- British Colombia Major Depression Inventory (BCMDI)
- Chronic Pain Values Inventory (CPVI)
- Sickness Impact Profile (SIP)
- Brief Pain Coping Inventory (BPCI)
- Pain Anxiety Symptom Scale (PASS)

Table 1. Sample Demographic Information

Measure	N (%) / M ± SD
Sample Size	255
Age (yrs)	50.82 ± 14.33
Sex	
Men	72 (29)
Women	179 (71)
Marital Status	
Single	35 (14)
Married/Co-Habitating	163 (65)
Divorced	33 (13)
Widowed	19 (8)
Ethnicity/Race	
Black/Caribbean	1 (.4)
Indian	1 (.4)
Other Asian	1 (.4)
White/Caucasian	246 (97)
Pakastani	1 (.4)
Other	1 (.4)
Years of Education	12.95 ± 3.03
Pain Duration (yrs)	11.43 ± 11.47
Usual Pain Intensity (NRS)	7.51 ± 1.70

Analyses

Aim: Seven separate linear regression models, with self-compassion predicting several measures of functioning (pain-related fear, depression, physical disability, psychosocial disability, pain acceptance, success in valued activities, and utilization of adaptive pain coping strategies), while controlling for age, gender, pain duration, and usual pain intensity in the past week.

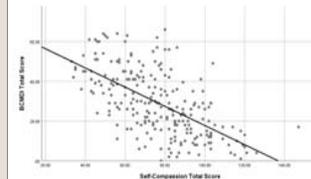## Results

Figure 1. SCS and Depression Scatterplot
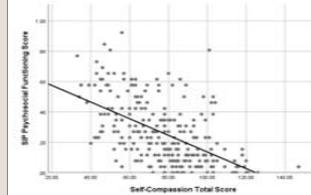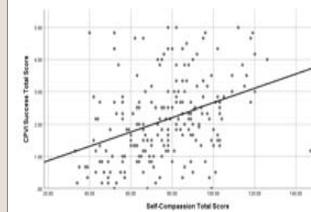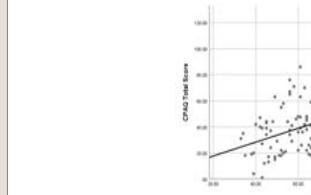

Figure 2. SCS and Pain-related Fear Scatterplot

Figure 3. SCS and Psychosocial Funct. Scatterplot

Figure 4. SCS and Physical Funct. Scatterplot

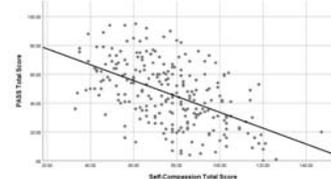Figure 5. SCS and Values Success Scatterplot
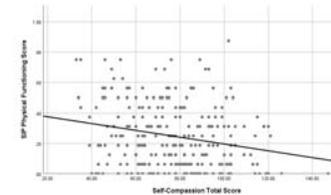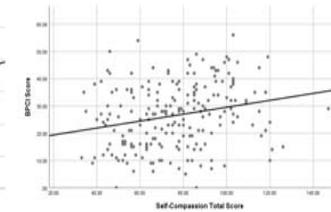

Figure 6. SCS and Pain Coping Scatterplot

Figure 7. SCS and Pain Acceptance Scatterplot

Results

Self-compassion was negatively associated with:

- Depression (F_{207} = 32.09; $p < .001$; R^2 = .44)
- Psychosocial functioning (F_{211} = 17.04; $p < .023$; R^2 = .29)
- Physical functioning (F_{212} = 6.98; $p < .001$; R^2 = .14)
- Pain-related fear (Pain anxiety) (F_{202} = 18.35; $p < .001$; R^2 = .32)

Self-compassion was positively associated with:

- Pain acceptance (F_{164} = 18.60; $p < .001$; R^2 = .37)
- Success on valued activities (F_{184} = 6.47; $p < .001$; R^2 = .15)
- Pain coping (F_{178} = 2.90; $p < .05$; R^2 = .08)

Among the covariates, higher pain was associated with worse physical functioning and depression, lower pain was associated with better pain acceptance, and older age was associated with worse physical functioning.

Table 2. Final step of each linear regression for each criterion variable

Criterion Variable	B	S.E.	T	Sig.	95% C.I. for B Lower	95% C.I. for B Upper
Depression (BCMDI)						
Self-Compassion	-.45	.04	-10.78	<.001	-.53	-.36
Pain-related Fear (PASS)						
Self-Compassion	-.52	.06	-8.40	<.001	-.65	-.40
Psychosocial Functioning (SIP)						
Self-Compassion	-.005	.001	-8.48	<.001	-.006	-.004
Physical Functioning (SIP)						
Self-Compassion	-.003	.001	-3.80	<.001	-.004	-.001
Values Success (CPVI)						
Self-Compassion	.02	.004	5.19	<.001	.01	.03
Pain Coping (BPCI)						
Self-Compassion	.14	.04	3.49	<.001	.06	.22
Pain Acceptance (CPAQ)						
Self-Compassion	.52	.06	8.56	<.001	.40	.64

Conclusions and Future Directions

- Self-compassion was significantly associated with better functioning across all seven measures, even after controlling for usual pain intensity in the past week, and pain duration.

- Among those with chronic pain, cultivating self-compassion may be an adaptive process that may contribute to improved health outcomes.

- Future studies should examine developing a new intervention or adapting a current intervention to target building self-compassion among those with chronic pain

Contact

Karlyn A. Edwards, kaedwards@unm.edu