

The Development of the Santa Clara Brief Compassion Scale: An Abbreviation of Sprecher and Fehr's Compassionate Love Scale

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Abstract This purpose of this study is to develop a brief version of Sprecher and Fehr's Compassionate Love Scale (2005). This was accomplished by administering the 21-item scale to college student participants and subsequently selecting five items for a brief version. The five items were selected based on the evaluation of high correlation coefficients between individual item responses and the overall total 21 questions from the original scale, the results of factor analysis, and items that had moderate means and high standard deviations. The correlation between the original and brief version is 0.96, while the internal reliability of the brief version, using Cronbach's alpha, is 0.90.

Keywords Assessment · Compassion · Compassionate love scale

Currently there is much interest in measuring and understanding positive personality characteristics, such as compassion, among younger generations that are coming of age (Batson et al. 2002; Dovidio and Penner 2001). A number of reliable and valid questionnaires regarding empathy, altruism, and compassion exist. However, the need for shorter measures of these constructs is necessary for a wide variety of research and clinical studies. This study sought to abbreviate Sprecher and Fehr's *Compassionate Love Scale*, a well known, respected, and both reliable and valid scale, by developing a briefer version that we entitled, the *Santa Clara Brief Compassion Scale* (SCBCS).

The *Compassionate Love Scale* was developed by Sprecher and Fehr (2005) in order to assess compassionate love in intimate relationships as well as for people in general. According to their definition, compassionate love is an "attitude toward other(s), either close others or strangers of all of humanity; containing feelings, cognitions, and behaviors that are focused on caring, concern, tenderness, and an orientation toward supporting, helping, and understanding the other(s)" (Sprecher and Fehr 2005, p. 630). They note that

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this definition is consistent with that of Lazarus (1991), who defined compassion as “being moved by another’s suffering and wanting to help” (Lazarus 1991, p. 289). Sprecher and Fehr (2005) used the term “compassionate love” rather than “compassion” in order to encompass emotional and transcendental nuances, although they acknowledged that their construct and scale could be named “altruistic love” or “compassion” (Sprecher and Fehr 2005, p. 630). In this study, we use the term “compassion,” rather than “compassionate love,” as the measure is intended for use in assessing compassion towards non-intimate others only, including strangers.

Studies have linked the development of qualities such as compassion and empathy to an increase in pro-social behaviors (Sprecher and Fehr 2005; Dovidio and Penner 2001; Davis 1996). Furthermore, research demonstrates that there is a positive correlation between empathy and community action (Batson et al. 2002). Thus, as research shows the positive benefits of developing compassion among individuals, it becomes increasingly necessary to have a quick, convenient, reliable and valid way to measure the construct.

Additionally, this study explores measures of vocational identity, religious faith, and empathy of participants in order to examine how compassion might be associated with these likely related variables. Past research demonstrates that compassion is related to one’s sense of vocation in helping a person to use her or his talents to make a positive contribution to the world (Peterson and Seligman 2004; Seligman 2002). As Sprecher and Fehr (2005) investigated how religiosity was associated with compassionate love, we also examined the relationship between compassion and religious faith to further assess the correlation between these two variables. Noting that Sprecher and Fehr (2005) made a distinction between empathy and compassionate love, we found it worthwhile to also compare scores on empathy and compassion among our participants. We hypothesize that a briefer version of the *Compassionate Love Scale* is possible that would allow clinicians, pastoral counselors, spiritual directors, and researchers the option of using a condensed version of the scale. Furthermore, we hypothesize that empathy, faith, and vocation would be modestly correlated with compassion.

Method

Participants

The results of 223 completed questionnaires were utilized in the data analysis. All participants were undergraduate students at Santa Clara University. Participants included 167 females and 56 males (M age=19.95 years, SD =1.33). Data was collected during the 2006–07 academic year.

Measures

Four different self-reporting scales, all with demonstrated and adequate reliability and validity, were used in this study’s assessment of compassion among university students.

Compassionate Love Scale (Sprecher and Fehr 2005). This scale assesses compassionate, or altruistic love, among various targets. The scale comprises 21 statements in which the participant indicates how true or false each is of themselves on a seven-point Likert scale. Cronbach’s alpha of the scale is reported to be 0.95.

Interpersonal Reactivity Index (Davis 1996). The *Empathic Concern* portion of this scale was used to assess participants’ relative level of personal empathy towards other people.

This is a six-statement questionnaire using a five-point Likert scale. Cronbach's alpha of the scale is reported to be 0.75.

Vocational Identity Scale (Dreher et al. 2007). This nine-statement questionnaire uses a five-point Likert scale to determine students' sense of vocational identity. Vocational identity is defined as a "strong sense of calling" (Dreher et al. 2007). Cronbach's alpha of the scale is reported to be 0.84.

Santa Clara Strength of Religious Faith Questionnaire (Plante and Boccaccini 1997). This questionnaire consists of ten statements that are rated by participants on a seven-point Likert scale indicating how true each statement is of themselves and their faith. Cronbach's alpha of the scale is reported to be 0.95.

Procedure

Following university human subject committee review and approval, questionnaires were presented to students either in classes, clubs, or in small groups who were planning on participating in alternative spring or winter break trips. Individual identities were coded to maintain confidentiality and results were converted to standard scores and analyzed using SPSS-XIII.

All items on the *Compassionate Love Scale* were correlated with the total score (i.e., the sum of the 21 items). Seven items with moderate means, high standard deviations, and high correlations with the overall score were initially selected as a brief version of the scale. Moderate means and high standard deviations were important to avoid ceiling or floor effects. Moderate means were defined as being between 4.28 and 5.48 (M of total 4.88 ± 0.60), while high standard deviations were defined as above 1.04 (SD of total). Item-to-total correlations higher than 0.75 were considered for inclusion in the brief compassion scale. From those seven items, a combination of five items with high reliability and correlations with other measures were used in the final brief version.

Results

Descriptive and factor analysis results

Psychometric properties of the *Compassionate Love Scale* are presented in Table 1. The mean score for each question was 4.88 (SD=1.04). The item-to-total correlations were high ranging from 0.45 to 0.86. Cronbach's alpha was 0.95. Items with moderate means (4.28–5.48), high standard deviations (>1.04), and item-to-total correlations above 0.75 were found for questions 3, 6, 9, 10, 11, 12, and 15.

We conducted a factor analysis of the *Compassionate Love Scale* using principle components analysis with Varimax rotation. Three factors were emerged in the analysis. One primary factor had eigenvalues of 11.12 and explained 53.94% of the variance. Two other factors had eigenvalues of 1.28 and 1.13 and explained 6.08% and 5.40% of the variance.

Selection of five items for a brief compassion scale

We selected questions 3, 9, 10, 11, and 12 for the brief compassion scale (see Appendix). Cronbach's alpha of the five-item scale was 0.90, while split-half reliabilities were 0.83 and 0.80. Since a set of four items demonstrated reliabilities lower than 0.90, the brief version

Table 1 Means, standard deviations, and item-to-total correlations for the 21-Item Compassionate Love Scale

	M	SD	Item-to-total correlation
Question 1	4.88	1.50	.62
Question 2	4.68	1.48	.64
Question 3	4.87	1.40	.76
Question 4	4.92	1.45	.70
Question 5	4.19	1.38	.71
Question 6	4.89	1.46	.76
Question 7	4.00	1.57	.72
Question 8	4.59	1.50	.67
Question 9	5.12	1.36	.79
Question 10	4.94	1.58	.76
Question 11	4.34	1.52	.77
Question 12	4.88	1.37	.86
Question 13	4.54	1.47	.76
Question 14	4.23	1.56	.51
Question 15	4.51	1.44	.84
Question 16	5.20	1.37	.58
Question 17	5.17	1.37	.68
Question 18	5.57	1.22	.66
Question 19	5.78	1.15	.53
Question 20	4.61	1.53	.71
Question 21	6.30	1.03	.46
Total score	4.88	1.04	alpha = .95

of this scale appeared to need five items. Questions 6 and 9 were similar in terms of content. They asked about “feeling compassionate love” and “feeling compassion,” respectively. We selected question 9 since this brief version sought to measure compassion and not compassionate love. Questions 12 and 15 asked about “tender feelings” and “extreme tenderness,” respectively. We selected question 12 among the two to ask about general tender feelings toward others.

A factor analysis of the five-item SCBCS was conducted using principle components analysis with Varimax rotation. One factor was extracted in the analysis. That primary factor explained 71.05% of the variance. Correlations between the five items of the scale ranged from 0.51 to 0.74 (see Table 2). Correlations between each item and the one factor ranged from 0.70 to 0.82 (see Table 3). A gender comparison indicated that women reported significant higher scores than men both on the original version [$M=5.02$, $SD=1.05$

Table 2 Pearson correlation matrix for the five items of the compassion scale

	3	9	10	11
Question 9	.68			
Question 10	.54	.62		
Question 11	.51	.56	.74	
Question 12	.68	.74	.65	.65

Table 3 Item-to-total correlations for the Five-Item Compassion Scale

	Item-to-total correlation
Question 3	.70
Question 9	.77
Question 10	.77
Question 11	.74
Question 12	.82

versus $M=4.45$, $SD=0.91$; $F(1, 223)=13.08$, $p<.001$] and on the brief version [$M=5.02$, $SD=1.19$ versus $M=4.24$, $SD=1.16$; $F(1, 223)=18.14$, $p<.001$]. Women also reported significantly higher empathy than men [$M=4.15$, $SD=0.57$ versus $M=3.83$, $SD=0.56$; $F(1, 223)=13.21$, $p<.001$].

Associations between compassion, compassionate love, and other compassion-related variables

We examined the relationship between compassion, compassionate love, and a set of compassion related variables of interest including vocational identity, religious faith, and empathy. Correlations between these measures are provided in Table 4. It was found that compassion and compassionate love were highly correlated [$r=0.95$, $p<.01$]. Both of these variables had significant positive correlations with vocational identity [$r=0.48$ and 0.51 , respectively, $p<.01$] as well as with religious faith [$r=0.27$, $p<.01$] and empathy [$r=0.65$, $p<.01$].

Discussion

Sprecher and Fehr's *Compassionate Love Scale* contributes significantly to the assessment of compassion and its relation to pro-social behaviors. *The Santa Clara Brief Compassion Scale* (SCBCS) is intended to extend the usefulness of this measure. The SCBCS is practical for large epidemiological studies, as its shorter length makes it easier to administer and to score. For instance, this scale is of ideal use for educational and religious institutions looking to examine how their programs and activities might impact the compassion of their members. In fact, beginning in 2007, Santa Clara University is planning on administering

Table 4 Correlations between vocational identity, faith, empathy and compassionate love

	Vocational identity	Religious faith	Empathy	Compassionate love
Religious faith	.26 ^a			
Empathy	.40 ^a	.25 ^a		
Compassionate love	.51 ^a	.27 ^a	.65 ^a	
Compassion	.48 ^a	.27 ^a	.65 ^a	.95 ^a

^a Correlation is significant at the 0.01 level (two-tailed)

this scale for all undergraduate students as they enter and exit the university after their four-year college experience. In abbreviating the *Compassionate Love Scale*, seven items were first chosen that demonstrated moderate means, high standard deviations, and high correlations with the overall 21-items. Five of the seven items were then selected in order to create a brief, practical, and psychometrically sound measure of compassion applicable for a multitude of uses. The correlation between the *Santa Clara Brief Compassion Scale* and the *Compassionate Love Scale* was 0.95. In addition, the factor analysis of the brief scale demonstrated only one factor whereas the original scale had three factors.

Although a two-item and three-item question version was considered, further analysis concluded that a version with less than five items demonstrated a Cronbach's alpha lower than 0.90 and split-half reliabilities lower than 0.80. Moreover, correlations among the five items were between 0.51 and 0.74, and thus not significant enough to combine into fewer items. Additionally, there was no single item that could represent the total of five items, as demonstrated by the correlations between each item and the one factor of compassion ranged from 0.70 to 0.82.

The SCBCS also demonstrated positive correlations with vocational identity, faith, and empathy that were found to be as significant as the original scale. Although this study did not use the same measures that Sprecher and Fehr (2005) selected for religiosity and empathy, both studies suggested that these two qualities were related to compassion or compassion love. The correlation between compassion and empathy [$r=0.65$] in our study suggests that these measures are not the same, which supports the findings of Sprecher and Fehr (2005). In addition, there was a positive correlation between vocational identity and compassion, as well as empathy. Seligman (2002) defines vocation as an engaged effort to use one's personal character strengths to positively impact the world. The association between vocation and compassion suggests that the ongoing development of compassion might lead to the development of vocation.

Gender differences in compassion were also found in both scales. These findings are consistent with the research of Sprecher and Fehr (2005) in that women tended to score higher on the scale than men. On the *Compassionate Love Scale* for Strangers the mean score for each question for women was 4.56 with a standard deviation of 0.98, whereas for men it was 3.88 with a standard deviation of 1.08 (Sprecher and Fehr 2005, p. 635). Similarly, with the SCBCS, we found women to score a mean of 4.15 with a standard deviation of 0.57, while men scored a mean of 3.83 with a standard deviation of 0.56.

In addition, since the SCBCS requires less time and energy than the 21-item version, it is suitable for people in poor physical and mental health condition. Furthermore, this scale can be used to test the effects of community-based learning activities, such as immersion trips and service work that may influence the development of compassion among individuals.

Future research should administer the SCBCS to a large number of diverse participants in order to further evaluate the reliability and validity of this brief version. Research should also consider using the SCBCS to explore the relationship between compassion and physical and mental health. Finally, both to assess the usefulness of the scale and the development of compassion, additional research should examine how educational programs, such as community-based learning, impact the development of compassion.

- Dreher, D. E., Holloway, K. E., & Schoenfelder, E. (2007). The vocation identity questionnaire: Measuring the sense calling. *Research in the Social Scientific Study of Religion, 18*, 99–120.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press.
- Plante, T. G., & Boccaccini, M. (1997). The Santa Clara strength of religious faith questionnaire. *Pastoral Psychology, 45*, 375–387.
- Seligman, M. E. P. (2002). *Authentic happiness*. New York: Simon & Schuster.
- Sprecher, S., & Fehr, B. (2005). Compassionate love for close others and humanity. *Journal of Social and Personal Relationships, 22*, 629–651.