

Psychometric Evaluation of the Sexual Assault Coping Self-Efficacy Scale



Desta Gebregiorgis, M.S., Caitlin Coyer, M.S., Lauren Hirsch, B.S., & Lynette Bikos, Ph.D.
Seattle Pacific University, WA

Introduction

- Sexual assault is estimated to affect one out of every six women (Kilpatrick et al., 2007) and results in long-lasting psychosocial effects.
- Legal advocacy may be one important source of social support for victims of sexual assault. King County Sexual Assault Resource Center (KCSARC) provides such a legal advocacy program throughout the legal process for people who have experienced sexual assault.
- Coping self-efficacy (CSE) is the ability to adapt to stressful situations (Bandura, 1993). It decreases in response to stressful situations following trauma (Kushner, Riggs, Foa, & Miller, 1993). Lower coping self-efficacy predicts PTSD and mediates the effect of trauma on PTSD symptomology (Benight & Bandura, 2004; Cieslak, Benight, & Lehman, 2008).
- The Sexual Assault Coping Self-Efficacy Scale was adapted from items from the Modified Domestic Violence Coping Self-Efficacy Measure (Benight, Harding-Taylor, Midboe, & Durham, 2004) to reflect coping self-efficacy following sexual assault.
- The original measure has excellent internal consistency and convergent validity with positive coping measures.

Current Study

- Test the structural validity of the Sexual Assault Coping Self-Efficacy measure.
- Provide information on the effectiveness of the Sexual Assault Coping Self-Efficacy measure for measuring CSE in people who have experienced sexual assault.
- Provide information that will allow for improvement and continued evaluation of KCSARC's legal advocacy program.

Participants and Procedures

Participants

- Data were collected as part of an ongoing program evaluation of KCSARC
- KCSARC clients who requested a legal advocate to assist them through legal prosecution
- Time 1 had the most participants ($N = 91$), followed by time 2 ($N = 51$) and time 3 ($N = 16$)
- All included participants were females over the age of 18
- Predominantly Caucasian and in the range of very low income or low income
- Majority had some high school and some college or technical training

Measures

- Participants were administered up to three survey packets total. Surveys were administered once per fiscal quarter (i.e., approximately three months apart)
- Data were collected by KCSARC either via paper surveys at the KCSARC main office or online surveys via SurveyMonkey. Data were de-identified and then sent to the researchers
- Measures used:
 - Sexual Assault Coping Self-Efficacy (Gibbs, Agatonovic, & Bikos, 2011; Benight et al., 2004): Measures capability to manage problems after sexual assault (5-point Likert scale ranging from 1 [completely incapable] to 5 [completely capable])
 - Sample Item: *Dealing with feelings of shame concerning the assault*

Analysis

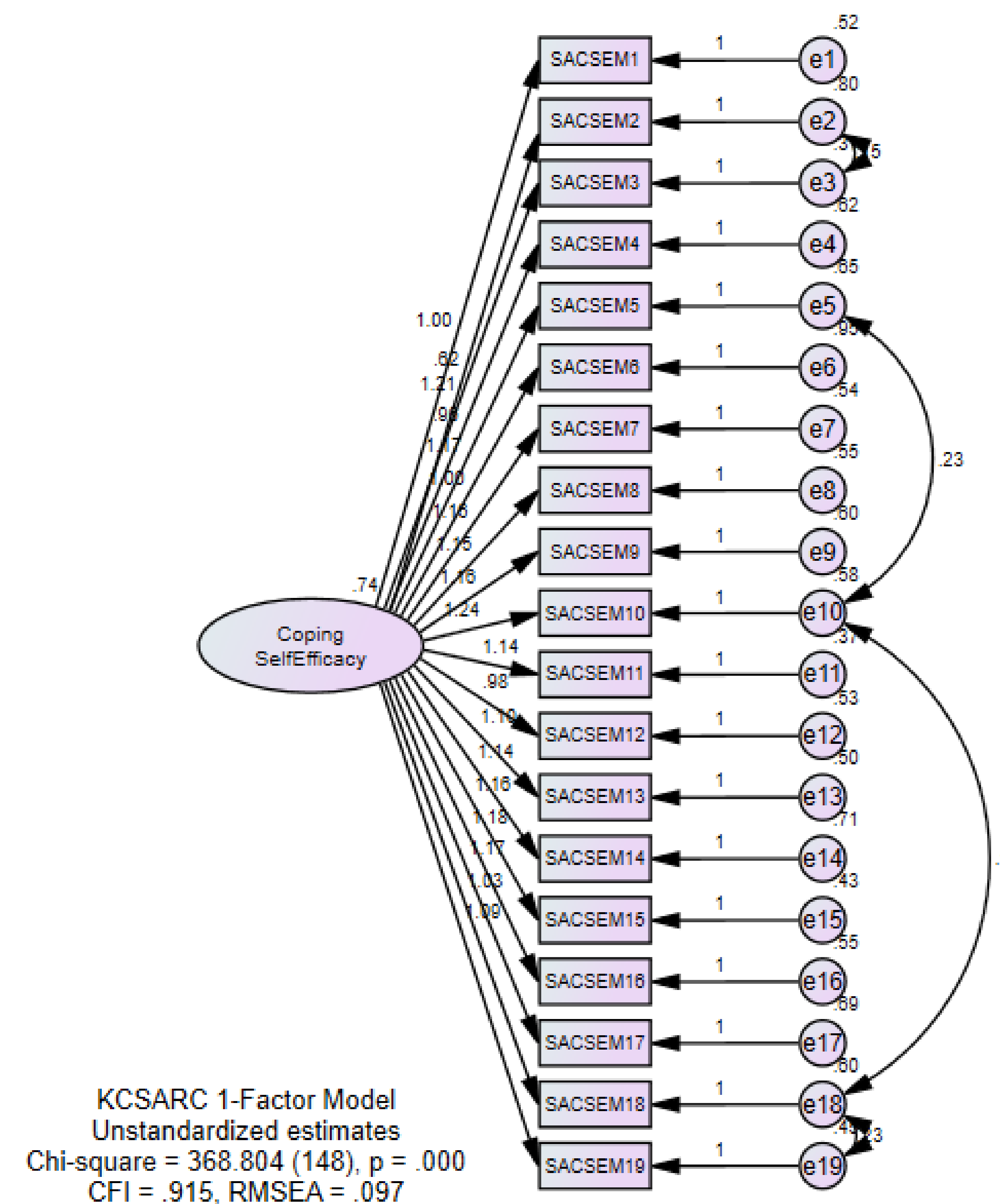
- Longitudinal program evaluation since 2013
- Multiple imputation (with 5 sets) was used to minimize missing data
- Data were first analyzed via exploratory factor analysis and then confirmatory factor analysis to evaluate model fit. Internal consistency and test-retest reliability were analyzed using SPSS.

Tables & Figures

Table 1
Confirmatory Factor Analysis Results for the SACSEM

Model	χ^2	df	Model comparison	$\Delta\chi^2$	Δ df	Fit1 (CFI)	Fit2 (RMSEA)
M1 – 1-factor	462.558	152				.881	.114
M2 – e18 < - > e19	430.408	151	1 vs. 2	32.150*	1	.893	.109
M3 – e05 < - > e10	405.412	150	2 vs. 3	24.996*	1	.902	.104
M4 – e10 < - > e18	382.736	149	3 vs. 4	22.676*	1	.910	.100
M4 – e02 < - > e03	368.804	148	4 vs. 5	13.932*	1	.915	.097

*denotes $p < .05$



Results & Discussion

Analyses:

Internal Consistency:

- Internal Consistency at Time 1 is .965
- Internal Consistency at Time 2 is .966
- Internal consistency at Time 3 is .975

EFA Analyses:

- Determinant = 2.13 E -008
- KMO = .948
- Bartlett's Test of Sphericity: $\chi^2 (171) = 2646.696, p < .001$
- Eigenvalues greater than one = 2
- Scree plot suggested one factor
- In the component matrix, only one item loaded onto the second factor but also significantly cross loaded onto the first factor
- Proceeded testing one-factor model of SACSEM

CFA Analyses:

- Made three modifications
- Final analyses: $\chi^2 (148) = 368.804, CFI = .915, RMSEA = .097$
- All items were significantly regressed upon the latent variable

Conclusions:

- Results supported a one-factor, 19-item measure
- Good structural validity; excellent internal consistency
- Ongoing program evaluation and way to evaluate benefit of program

Limitations:

- Primarily Caucasian and younger clients; only analyzed female data
- Sexual and gender identity not asked (LGBTQ+ individuals experience higher rates of violence; Langenderfer-Magruder, Walls, Kattari, Whitfield, & Ramos, 2016)
- Measure was originally not available for non-English speakers or those who are visually impaired
- Small sample size, participants excluded because of age and gender criteria, and missing data (attrition)

Future Research:

- Translate measure in different languages; have text-speak option for the measure
- Modify data collection to evaluate and compare marginalized communities (i.e., LGBTQ+ and PoC)
- Compare psychometrics for different groups of women (invariance testing)
- Investigate factors that reduce secondary victimization throughout the legal process.

References

- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: Freeman.
- Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy*, 42(10), 1129-1148. doi:10.1016/j.brat.2003.08.008
- Benight, C. C., Harding-Taylor, A. S., Midboe, A. M., & Durham, R. L. (2004). Development and psychometric validation of a domestic violence coping self-efficacy measure (DV-CSE). *Journal of Traumatic Stress*, 17(6), 505-508. doi:10.1007/s10960-004-5799-3
- Cieslak, R., Benight, C. C., & Lehman, V. C. (2008). Coping self-efficacy mediates the effects of negative cognitions on posttraumatic distress. *Behaviour Research and Therapy*, 46(7), 788-798. doi:10.1016/j.brat.2008.03.007
- Gibbs, R., Agatonovic, J., Bikos, L. (2011). *A participatory evaluation of a legal advocacy program for victims of sexual assault* (Unpublished doctoral dissertation). Seattle Pacific University, Seattle, Washington.
- Kilpatrick, D. G., Resnick, H. S., Ruggiero, K. J., Conoscenti, L. M., & McCauley, J. (2007). Drug-facilitated, incapacitated, and forcible rape: A national study. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/219181.pdf>
- Kushner, M. G., Riggs, D. S., Foa, E. B., & Miller, S. M. (1993). Perceived controllability and the development of posttraumatic stress disorder (PTSD) in crime victims. *Behavior Research and Therapy*, 31, 105-110.
- Langenderfer-Magruder, L., Walls, N. E., Kattari, S. K., Whitfield, D. L., & Ramos, D. (2016). Sexual victimization and subsequent police reporting by gender identity among lesbian, gay, bisexual, transgender, and queer adults. *Violence and victims*, 31(2), 320.