A New Chinese Measure of Generalized Expectancies for Negative Mood Regulation

Jack Mearns[1], Guofang Wang[2], Xiaohui Yang[2], Peng Han[2] &
Salvatore J. Catanzaro[3]

[1]California State University, Fullerton, USA
[2]China University of Political Science and Law, Beijing, China
[3]Illinois State University, Normal, USA

Abstract

Negative mood regulation expectancies (NMRE) represent people's confidence that they can terminate their negative mood states. Going beyond literal translation, we sought to create a culturally valid measure of NMRE for China. Data support this 32-item questionnaire's reliability and validity. Comparisons with the Japanese NMRE scale reveal cultural differences.

摘要

消极情绪调节期待（NMRE）代表人们对消除其消极情绪状态的信心。为避免直译量表忽视文化差异的局限，我们补充了中国文化情境下的特定项目，试图探讨NMRE施测于中国人群的文化效度。研究结果支持了32个项目问卷的信度和效度。与NMRE量表日文版的比较，同样显示出文化的差异。

Negative mood regulation expectancies (NMRE) are conceptualized within Rotter's (1954, 1982) social learning theory as representing people's confidence that, when they are in an unpleasant mood state, they will be able to feel better (Catanzaro & Mearns, 1990, 1999). Twenty-five years of research with the American NMR Scale has shown that NMRE predict coping and mood outcomes, including cognition during negative moods and symptoms of depression and anxiety (Mearns, Patchett & Catanzaro , 2009). Improvements in NMRE early in psychotherapy predict more successful therapy results (e.g., Backenstrass et al., 2006; Cloitre, Stovall-McClough, Miranda & Chemtob, 2004).

Barlow, Allen and Choate (2004) have posited that engaging in adaptive emotional regulation makes it less likely that individuals will attempt to suppress negative emotions. This suppression leads to "a vicious cycle of increased emotional arousal, leading to more unsuccessful attempts at suppression, which in turn contributes to growing psychological distress" (p. 217). Cloitre, Stovall-McClough, Zorbas, and Charuvastra (2008) concur that failures in negative mood regulation play a central role in the development and maintenance of emotional disorders. Thus, strong NMRE appear to have the potential to play a significant role in maintaining healthy functioning during periods of stress.

The 30-item American NMR Scale has been translated into several languages. Because of cultural similarities, German and Spanish measures are literal translations (Backenstrass, Pfeiffer, Schwarz, Catanzaro & Mearns, 2008; Pfeiffer et al., 2012). However, because of cultural differences--particularly, social obligations related to mood regulation--the Japanese version is a 40-item scale that includes new items created for the Japanese culture (Benet-Martinez, 2007; Markus & Kitayama, 1991). While European-language NMR Scales have been unifactorial, factor analysis of the Japanese measure revealed two additional, smaller factors relating to social aspects of mood regulation (Mearns et al., 2012).

To create a culturally-valid Chinese measure of NMRE, we followed the approach used for the Japanese scale. We first translated the 30 American items into Chinese. We then translated 15 originally Japanese items. All items were back-translated and discrepancies resolved. Next, we interviewed Chinese people concerning how they deal with unpleasant moods. These interviews generated 18 new items specifically for the Chinese scale. We collected pilot data from 45 individuals. The 63-item scale had a Cronbach's alpha of .92. Based on these data, we deleted 5 items and modified 4 others.

Method
We next collected data from two samples of Chinese college students--one rural and one urban--totaling 713 participants from 4 universities (64.9% women). In addition to the 58-item Chinese NMR Scale (NMR-C), we administered Chinese versions of the State Anxiety Inventory, the Center for Epidemiological Studies Depression Scale, the Ways of Coping, and the Marlowe-Crowne Social Desirability Scale. Participants completed the scales in a single session. A small subset of 80 participants was administered the NMR-C again after a one-month interval.

Results and Discussion
Reliability. We analyzed the internal consistency of the NMR-C, as well as individual items' correlations with criterion scales. As a consequence, we retained 32 items--17 from the American scale, 8 from the Japanese scale, and 7 newly created for the Chinese measure. The 32-item NMR-C had a Cronbach's alpha of .88. All items had corrected item-whole correlations above .30, significant correlations with at least one criterion measure, and correlations with the Marlowe-Crowne

that were lower than their item-whole correlations and correlations with criterion scales. Test-retest reliability over one month was .81.

   Validity. Overall, the NMR-C correlated significantly with coping: .32 with problem-focused, .16 with emotion-focused, and -.28 with avoidant. The NMR-C was significantly but modestly correlated with social desirability (.22). The NMR-C showed strong correlations with anxiety (-.53) and depression (-.57) (all $p < .01$). These results are similar to those of other languages' NMR scales, although the NMR-C's correlations with negative mood are stronger. Contrary to expectation, a factor analysis showed the NMR-C to be unifactorial. Even though China is an interdependent culture like Japan, unlike Japan, social aspects of mood regulation did not emerge as distinct facets of mood regulation expectancies for Chinese.

Table 1
Intercorrelations of Scales

	State Anxiety	Depres-sion	Prob-foc. Coping	Avoidant Coping	Emo.-foc. Coping	M-C SD	NMR-C
State Anx	--	.67**	-.21**	.24**	-.09*	-.14*	-.53**
depress.		--	-.18**	.42**	-.06	-.18**	-.57**
P-F Cope			--	.09*	.31**	-.12*	.32**
Av. Cope				--	.13**	-.12*	-.28**
E-F Cope					--	-.15**	.16**
M-C SD						--	.22**

Note. Prob-foc. coping=Problem-focused coping. Emo.-foc. coping=Emotion-focused coping. M-C SD=Marlowe-Crowne social desirability scale. NMR-C=Chinese NMR Scale.
*$p < .05$. **$p < .01$.

   Our results support the reliability and preliminary validity of the NMR-C as a measure of NMRE in China.

Selected References

Backenstrass, M., Pfeiffer, N., Schwarz, T., Catanzaro, S. J., & Mearns, J. (2008). Reliabilitaet und validitaetder Deutschsprachigen version der Generalized Expectancies for Negative Mood Regulation (NMR) Scale [Reliability and validity of the German version of the Generalized Expectancies for Negative Mood Regulation (NMR) Scale]. *Diagnostica, 54,* 43-51.

Benet-Martinez, V. (2007). Cross-cultural personality research: Conceptual and methodological issues. In R. W. Robins, R. C. Fraley & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 170-189). New York: Guilford.

Catanzaro, S. J., & Mearns, J. (1990). Measuring generalized expectancies for negative mood regulation: Initial scale development and implications. *Journal of Personality Assessment, 54,* 546-563.

Catanzaro, S. J., & Mearns, J. (1999). Mood-related expectancy, emotional experience, and coping behavior. In I. Kirsch (Ed.) *Expectancy, experience and behavior* (pp. 67-91). Washington, DC: American Psychological Association.

Cloitre, M., Stovall-McClough, K. C., Miranda, R., & Chemtob, C. M. (2004). Therapeutic alliance, negative mood regulation, and treatment outcome in child abuse-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology, 72,* 411-416.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98,* 224-253.

Mearns, J., Self, E., Kono, K. Sato, T., Takashima, E., Tresno, F., … Catanzaro, S. J. (2012). *Measuring generalized expectancies for negative mood regulation in Japan: The Japanese language NMR Scale*. Manuscript submitted for publication.

Pfeiffer, N., Martinez, V., Mearns, J., Catanzaro, S. J., Rojas, G., Backenstrass, M., & Kaemmerer, A. (2012). Preliminary reliability and validity of the Spanish Generalized Expectancies for Negative Mood Regulation Scale. *Pan American Journal of Public Health, 31,* 129-134.

Rotter, J. B. (1954). *Social learning and clinical psychology*. New York: Prentice-Hall.

   Please contact: Jack Mearns, Department of Psychology, California State University, Fullerton, P. O. Box 6846 (H-830M), Fullerton, CA 92834-6846. E-mail: jmearns @ fullerton.edu. Further information on theory and research pertaining to NMRE can be accessed at this web site: **http://psych.fullerton.edu/jmearns/research.htm**.

   也可用中文联系王国芳：中国政法大学社会学院，中国北京市海淀区西土城路25号，邮编：100088
   邮箱：guofangwangzh @ gmail.com