Creating a Japanese Measure of Generalized Expectancies for Negative Mood Regulation

Jack Mearns[1], Eriko Miyahara[1], Fiona Tresno[2], Yuko Watabe[1],
Keiko Kono[1] & Emaka Takashima[1]

[1]California State University, Fullerton, USA
[2]Nagoya University, Japan

Abstract

The construct of Negative Mood Regulation expectancies (NMRE) is sufficiently different between Japanese and American cultures to require going beyond literal translation of the American scale to include items that assess ways Japanese may attempt to regulate mood that differ from how Americans do. We collected data from two samples of Japanese college students. Data support the reliability and initial validity of the new Japanese NMR Scale.

概要

負の感情に対する態度（NMR）の複合概念は日本とアメリカの文化では異なるため、アメリカの心理測定尺度を逐語的に訳すだけではなく、アメリカ人とは違った日本人独特の感情規制を測るための項目を加えることが必要である。本研究では、日本の大学生を対象に二か所の大学で調査を実施した。 調査の結果、日本人を対象としたNMR尺度（NMR J）の信頼性と妥当性が確認された。

Catanzaro and Mearns (1990) defined negative mood regulation expectancies (NMRE) within Rotter's (1954) social learning theory as people's beliefs that, when they experience an unpleasant mood, they can do something to make themselves feel better. Over 20 years of research support the validity of the NMR Scale that measures these expectancies (Mearns, Patchett & Catanzaro, in press). Stronger NMRE are associated with better adjustment, more adaptive coping, and fewer symptoms of emotional and physical distress (Catanzaro & Mearns, 1999). Recent research suggests raising NMRE is an important aspect of psychotherapeutic success (e.g., Backenstrass et al., 2006; Cloitre, Stovall-McClough, Miranda, & Chemtob, 2004).

The NMR Scale consists of 30 items, completing the stem, "When I'm upset, I believe that…." Each item represents a statement about the potential outcome of employing a cognitive or behavioral strategy for regulating one's mood. A German language NMR Scale has been published (Backenstrass, Pfeiffer, Schwarz, Catanzaro, & Mearns, 2008), which was a direct translation of the American scale. Many Japanese psychological measures are literal translations of English language scales, following an *imposed-etic* approach (Benet-Martinez, 2007). Because of differences between Japanese and American cultures, we went beyond direct translation to create a culturally relevant Japanese NMRE measure, integrating an *emic* approach.

A bi-cultural, bi-lingual team translated the original 30 NMR Scale items, and generated an additional 25 new items representing ways Japanese may regulate mood that differ from how Americans do. These included items about social obligations and concerns about social judgment related to negative mood. Items were backtranslated; discrepancies and ambiguities in wording were corrected.

Method: We tested two samples of Japanese college students. Sample 1: 315 freshman at an urban university (50% female; mean age = 18.84); Sample 2: 359 students at a rural university (56% female; mean age = 19.86). In addition to the 55-item Japanese NMR Scale (NMR-J), Sample 1 completed measures of depression, incidence of self-injury, and suicidal intention. Sample 2 completed additional measures of coping; symptoms of depression, anxiety and somatic complaints; and social approval motivation (socially desirable responding).

Results: The NMR-J had an overall alpha of .87. Table 1 presents intercorrelations of scale totals for Sample 2. The NMR-J correlated positively with coping (r=.34, p<.01) and social approval motivation(r=.19, p<.05), and negatively with depression (r=-.51, p<.01), anxiety (r=-.35, p<.01) and somatic complaints (r=-.29, p<.01). We also calculated correlations separately for males and females (see Table 1). ANOVA analyses showed significant sex differences for all variables except coping. The level of difference for the NMR-J was similar to that found for the American NMR Scale (males: *mean*=170.09; females: *mean*=163.50; F(1, 357)=7.33, p<.01).

We next correlated individual items with the criterion measures. Based on these results, we deleted 15 items that had weak corrected item-whole correlations or did not correlate with criterion measures. The resulting 40-item scale had a Cronbach's alpha of .88, correlated very highly with the original 55-item measure (r=.98, p<.01), and maintained significant correlations with other scales. We conducted a factor analysis, which revealed a single factor that accounted for a large portion of variance. Two other factors had eigenvalues above 2.0. These appeared to assess (a) social methods for mood regulation, and (b) concerns about social obligations or criticism by others related to negative moods.

Discussion: Results support the initial reliability and validity of the 40-item Japanese language NMR Scale. The scale showed strong internal consistency, significant correlations with criterion measures of coping and distress, and a modest correlation with socially desirable responding. Results support the utility of assessing the NMRE construct in the Japanese population, and reinforce the appropriateness of an emic approach that seeks to create a Japanese measure that is culturally

relevant. The disadvantage of this emic approach is that comparisons of scores between U.S. and Japanese measures will be impossible. The advantage is that the NMR-J will be culturally accurate.

Further research should examine non-college student populations, use non-self-report criteria and incorporate longitudinal designs. Also examination of NMRE's role in psychotherapy in Japan will be illuminating.

Table 1
Intercorrelations of Scales

	NMRJ	coping total	Hopkins Somatic	Hopkins Depress.	Hopkins Anxiety	MLAM SD	NMRJ revised
NMRJ	--	**.34**** *.33*** .33**	**-.29**** *-.32*** -.23**	**-.51**** *-.53*** -.46**	**-.35**** *-.34*** -.35**	**.19**** *.11* .25**	
coping total		--	**.07**	**-.07**	**.00**	**-.03**	
Hopkins Somat.			--	**.59****	**.63****	**-.04**	
Hopkins Depres.				--	**.73****	**-.26****	
Hopkins Anxiety					--	**-.19****	
MLAM SD						--	
NMRJ revised 40 item	**.98**** *.98*** .97**	**.31**** *.29*** .32**	**-.33**** *-.36*** -.27**	**-.55**** *-.58*** -.50**	**-.39**** *-.37*** -.39**	**.22**** *.12* .29**	--

Note. NMRJ=Japanese Negative Mood Regulation Scale. MLAM=social approval motivation. **Bold=combined males and females**. *Italics=males only.* Underlined=females only.
**p<.01.

References

Backenstrass, M., Schwarz, T., Fiedler, P., Joest, K., Reck, C., Mundt, C., & Kronmueller, K.-T. (2006). Negative mood regulation expectancies, self-efficacy beliefs, and locus of control orientation. *Psychotherapy Research, 16,* 250-258.

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.

Mearns, J., Patchett, E., & Catanzaro, S. J. (in press). Multitrait-multimethod matrix validation of the Negative Mood Regulation Scale. *Journal of Research in Personality.*

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