

ASSESSING SELF-EFFICACY IN INFANT CARE: A COMPARISON OF TWO SCALES

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Purpose of the Study

Self-efficacy in Infant Care Scale (SICS), a 40-item self-administered questionnaire was developed for use in a Thai population to assess the degree of maternal belief in her ability to perform the designated infant care tasks; and its acceptable psychometric properties were reported elsewhere. According to Bandura's (1997) suggestion of self-efficacy scale construction, mothers were asked to rate their self-efficacy in each item on a range in 10-unit intervals from 0 = not confident at all to do it, 50 = moderately confident I can do it, and 100 = definitely confident I can do it. While response task of the SICS using 0-100 confidence continuum, many existing tools measuring self-efficacy in some aspects use Likert-type rating scales that consists of choices from 1 to 4, 1 to 5, or 1 to 6. Concerning the convenience and the appropriateness in use of Likert-type scale with low-literate group of mothers, to examine the possibility of using the SICS Likert-type scale is challenged. The purpose of the current study was to compare two approaches for measuring self-efficacy in infant care: one based on the original response format, the other on a Likert-type format (that is, a six-point fully semantically anchored scale ranging on 0 = not at all confident, 1 = little confident I can do it, 2 = somewhat confident I can do it, 3 = moderately confident I can do it, 4 = very confident I can do it, and 5 = definitely confident I can do it).

Method

Eligible subjects included mothers whose formal education was not greater than 9 years which is the minimum education Thai people must receive, according to the National Education Act B.E. 2542 (1999). Large effect size was claimed to calculate sample size. Forty two mothers who took their infants to the well-baby clinic for immunizations at Samutsakorn Hospital were recruited. Each eligible mother firstly completed the original scale and then followed by the 6-point rating scale of the SICS. Afterwards, the mothers were asked to indicate which type of the questionnaires was easier to administer.

Results

Of all mothers, 45% were first-time mothers, 55% were non employed, and 48% got highest educated at ninth grade while the rest at sixth grade. The reliabilities using Cronbach's alpha of both entire scales were equal ($\alpha = .95$). Correlations between the same items from the two different response formats of the SICS were calculated. Only one pair of items was found to be low correlated ($r = .25, p > .05$), five pairs moderately correlated ranging from .37 to .46, twenty three pairs highly correlated ranging from .51 to .68, and eleven pairs very highly correlated ranging from .70 to .83. Correlations between the same subscales and also between both total scales of the two different response format were very high ranging from .77 to .87. Slightly over half of the entire mothers (57%) preferred a 6-point rating scale. Interestingly, 59% of the 6th grade group preferred the original scale, compared to only 25% of the 9th grade group.

Conclusion

Among low educated mothers, the SICS with 6-point rating scale can be used in place of that with 0-100 confidence continuum. In fact, the SICS with either response format can be used if the instruction of how to administered the scale is sufficiently informed to the subjects.

Keywords: *Infant care, Likert-type scale, Scale development, Self-efficacy*

(Paper presented at the 6th International Nursing Conference, "Building Network through Nursing Research," Soul, South Korea, November 8, 2007)