

MEASURING MASLOW'S HIERARCHY OF NEEDS¹

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Summary.—Two scales have been proposed to measure Maslow's hierarchy of needs in college students, one by Lester (1990) and one by Strong and Fiebert (1987). In a sample of 51 college students, scores on the corresponding scales for the five needs did not correlate significantly and positively, except for the measures of physiological needs. Furthermore, there was limited support for Maslow's hypothesis that need deprivation would predict psychopathology (specifically, mania and depression).

Maslow (1954) proposed a classification of basic needs into five categories: physiological, safety and security, belongingness, esteem, and self-actualization. He hypothesized that these needs appeared sequentially as one moved up the phylogenetic scale and as the human individual developed from birth to adulthood. Furthermore, the lower needs were more powerful (prepotent) than the higher needs. The more these basic needs were satisfied, the better would be the psychological health of the individual.

Lester, Hvezda, Sullivan, and Plourde (1983) devised a 50-item scale to measure the level of satisfaction of these five basic needs, rated on a 6-point Likert-type scale with anchors -3: Strongly disagree and 3: Strongly agree, with 10 items for each need. For example, a typical item for esteem was "I feel that I am a worthy person." Lester, *et al.* (1983) found that the greater the satisfaction of these five basic needs in a sample of college undergraduates, the lower their scores on a measure of neuroticism and the lower their scores on a measure of a belief in an external locus of control. Lester (1990) replicated this earlier study, finding that the level of satisfaction of the needs was associated with scores on a measure of neuroticism, but no psychometric data were provided for the scale.

Strong and Fiebert (1987) developed a test which they intended, "to assess Maslow's need hierarchy" (p. 494), which paired statements from two needs at a time and asking respondents which was more important to them on a scale of 0 to 100, for example, "Being respected by friends and co-workers" (esteem need) vs "Being spontaneous and open to new experiences" (self-actualization need). If respondents assigned a score of, say, 80 to the esteem need statement, then the self-actualization was given a score of 20 (100-80) automatically. Strong and Fiebert found that

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the scores for the five needs matched their order in the hierarchy, with the higher needs receiving higher scores.

The present study was designed: (i) to compare scores obtained on these two inventories to explore whether the two scales measure similar constructs, (ii) and to explore correlates of the scores with a measure of psychological health, namely depressive and manic tendencies. Both scales were administered to 9 men and 42 women enrolled in undergraduate psychology courses at a rural state college (M age = 24.0, SD = 8.9), along with an 18-item manic-depressive inventory (Thalbourne, Delin, & Bassett, 1994; Rogers & Lester, 2010). Mean scores are shown in Table 1. Cronbach's α reliabilities for the five subscales on Lester's inventory were: physiological needs .57, safety needs .76, belongingness needs .45, esteem needs .65, and self-actualization needs .56.

The scores on the Strong and Fiebert inventory came out in almost the same order as reported by Strong and Fiebert: physiological needs 71, safety needs 81, belongingness needs 79, esteem needs 82, and self-actualization needs 88 (Table 1). Only the score for belongingness needs was out of place, being rated as less important than safety needs.

Four of the five corresponding scores on the Lester (1990) and the Strong and Fiebert (1987) inventories did *not* correlate positively and significantly: safety Pearson $r = -.18$, belongingness $r = .17$, esteem $r = -.37$ (two-tailed $p = .01$), and self-actualization $r = -.35$ ($p = .01$). Only scores for physiological need were positively correlated ($r = .30$, $p = .04$, 95%CI = .03, .53).

Mania scores did not correlate positively with any of the 10 scores on the two Maslow inventories (r s ranged from $-.24$ to $.12$). Depression scores were correlated positively with safety scores on Lester's inventory ($r = .39$, $p = .007$, 95%CI = .13, .60) and negatively with physiological and safety scores on the Strong and Fiebert inventory (r s = $-.33$ and $-.43$, respectively, $p < .02$, 95%CIs = $-.56$, $-.06$ and $-.63$, $-.18$, respectively). Thus, on Lester's scale, the safer students felt, the more depressed they were. On the Strong and Fiebert scale, the less important physiological and safety needs were, the more depressed the students were (Table 1).²

It appears, therefore, that these two scales to assess Maslow's hierarchy of needs are measuring very different constructs. Looking at the wording, Lester's scale assesses the extent to which the five needs are *satisfied* in the respondents, whereas the Strong and Fiebert scale measures how *important* each need is to the respondent, and this difference in wording may account for the lack of construct similarity for the two scales. No support was found for Maslow's hypothesis that psychological health is associated with the level of satisfaction of the five basic needs. Four of the

²Scores on the needs were also not significantly correlated with past suicidal ideation or suicide attempts [Items 8 and 18 on Thalbourne, *et al.*'s (1994) scale].

TABLE 1
 MEAN SCORES ON LESTER'S SCALE MEASURING MASLOW'S NEEDS AND CORRELATIONS WITH MANIA,
 DEPRESSION, AND STRONG AND FIEBERT'S MASLOW'S NEEDS SCALE

Measure	M	SD	Pearson <i>r</i> with:		
			Mania	Depression	Strong & Fiebert
Lester's scales					
Physiological	4.2	8.3	.12	-.13	.30*
Safety	6.2	9.9	.01	.39*	-.18
Belongingness	12.9	7.5	-.10	-.10	.17
Esteem	13.2	7.8	-.18	-.09	-.37*
Self-actualization	14.5	7.0	.11	-.10	.10
Strong & Fiebert's scales					
Physiological	71.1	14.1	-.20	-.33*	
Safety	80.8	14.5	-.24	-.43*	
Belongingness	78.7	15.7	-.16	-.18	
Esteem	81.7	11.1	-.07	-.20	
Self-actualization	87.7	13.9	.01	.15	
Manic score	5.4	1.6			
Depression score	3.6	2.0			

*two-tailed $p < .05$.

needs were not significantly associated with mania or depression scores, and the association between satisfaction of safety needs and depression was in an opposite direction to that predicted. The study was limited by the use of psychology students, who were primarily female, and the limited sample size. Further research is needed to develop reliable and valid measures of the concepts related to Maslow's hierarchy of needs.

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