Feeling Loved, a novel self-report health measure: Convergent and discriminant validity

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BACKGROUND

Mental, physical, and social health are interdependent, and can be assessed by well-designed and validated self-report measures. The sense of feeling loved by others and of loving oneself might relate to other health domains. However, there is very little empirical research on how the "feeling loved" health domain might influence – or be influenced by – other health domains and determinants.

FEELING LOVED

Please answer **all four** of following questions.

1 **Do you feel loved?**   ○ Yes ○ No

Please indicate how loved you feel, on average, on the scale below.

Simply put an "X" on the scale at the point that best captures how loved you feel.

2 **How loved do you feel?**

| 0 10 20 30 40 50 60 70 80 90 100 |

Not at all — *Very, very much*

3 **Do you love yourself?**   ○ Yes ○ No

Please indicate how much you love yourself, on average, on the scale below.

Again, simply put an "X" on the scale at the point that best captures how much you love yourself.

4 **How much do you love yourself?**

| 0 10 20 30 40 50 60 70 80 90 100 |

Not at all — *Very, very much*

METHODS

- Self-report questionnaire instrument
- Concurrent comparators used to assess convergent validity: general health (SF12), social support (SPS), perceived stress (PSS10), depressive symptoms (PHQ9), and positive and negative emotion (PANAS).
- Sleep quality, self-efficacy, mindfulness, & Big Five personality traits also used.
- Comparators for assessing discriminant validity included: gender, age, ethnicity, socioeconomic status, body mass index, and a few laboratory biomarkers.
- Latent class analysis to explore the psychometric structure of Feeling Loved data.

RESULTS

412 adults completed Feeling Loved and other questionnaires. Most respondents felt loved, with 59% of people self-rating ≥75/100 on both 0-to-100 VAS scales, and 28% rating ≥90/100. Supporting convergent validity, statistically significant (p<0.0001) Spearman's rho=ρ correlations of the summed Feeling Loved score were found with: SF12 mental health (ρ= 0.492); SPS (ρ= 0.470); PSS10 (ρ= -0.470), PHQ9 (ρ= -0.316), MAAS (ρ= 0.364) and both positive (ρ= 0.502) and negative (ρ= -0.429) emotion. Supporting discriminant validity, Feeling Loved scores were correlated with but distinct from all psychosocial comparators, and were not associated with gender, age, body mass index, socioeconomic status, self-reported physical health, or clinical laboratory values (hsCRP; HbA1C). Multivariate latent class analysis models suggested a 3-class structure (low, moderate and high love), with strong goodness-of-fit indicators.

Table 1. Demographics of study population

Sample size (n)	413
Age in years, mean (SD)	49.7 (11.6)
Female, n (%)	313 (76%)
Nonsmokers, n (%)	387 (94%)
Race: Black n (%)	25 (6%)
White n (%)	348 (85%)
Others n (%)	38 (9%)
Ethnicity Non-Hispanic, n (%)	378 (94%)
College graduate or higher, n (%)	315 (76%)
Household income >$50,000, n(%)	248 (61%)
Personal hourly salary, mean (SD)	$26.43 ($16.16)

Figure 1. Distributions of Feeling Loved response data
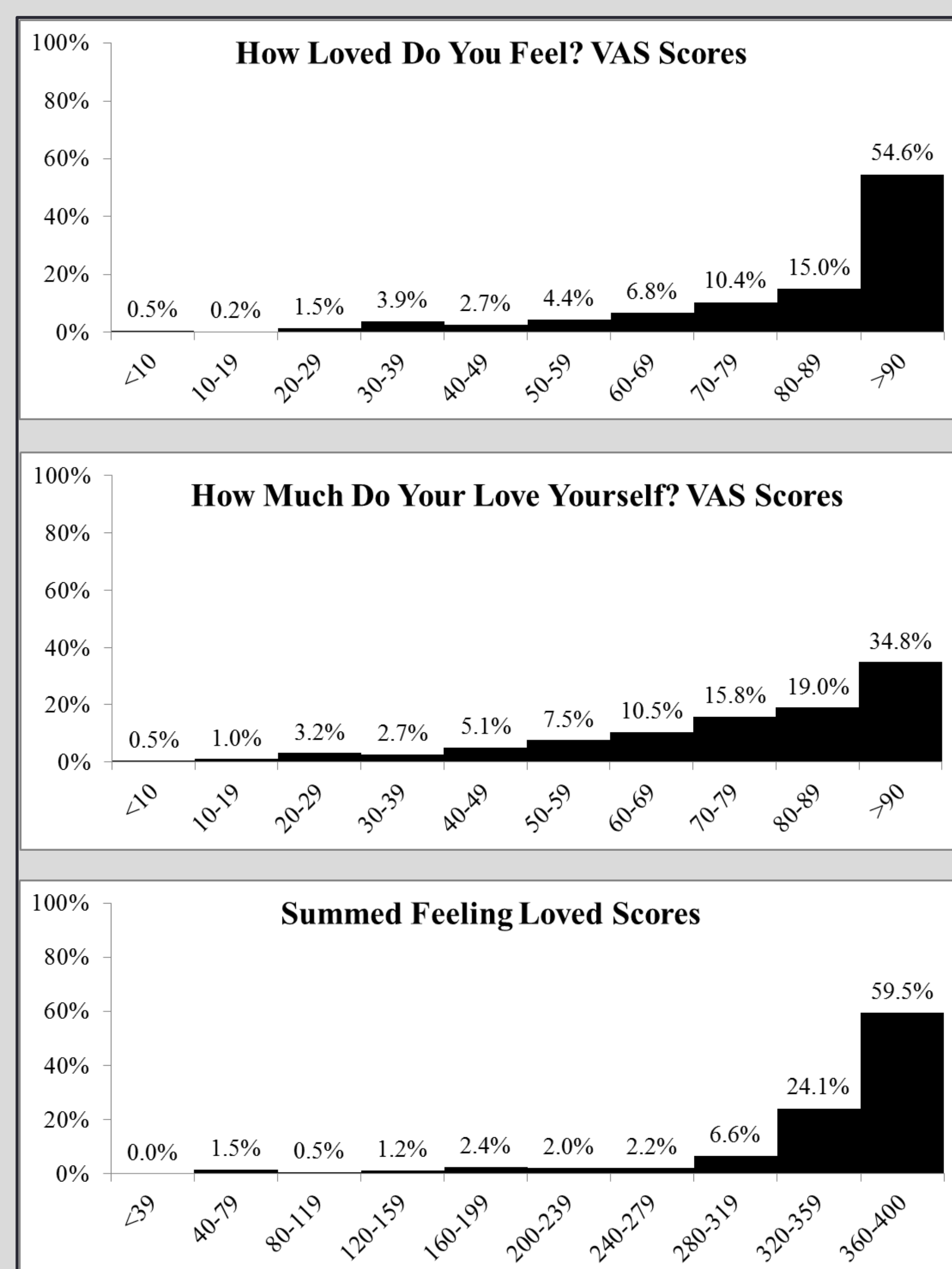
CONCLUSIONS

The sense of feeling loved may be an important domain of mental and social health. The novel Feeling Loved self-report instrument represents one approach in this direction. The data portrayed here provide robust evidence of convergent and discriminant validity, supporting construct validity. Latent class analysis statistical methods indicate a coherent 3-class structure. Feeling Loved may turn out to be a useful measure for psychological, social, and human health studies. Further testing and validation is warranted.

Figure 3. Factors Distinguishing Low and Medium Love Classes

Figure 4. Factors Distinguishing Medium and High Love Classes

Figure 5. Factors Distinguishing Low and High Love Classes

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