Lies and Damn Lies About Satisfaction Ratings

Case Mix Conference, Niagara Falls - October 29th-31st 2001

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Evaluators make frequent use of satisfaction ratings to evaluate the success of programs (e.g., in health and education). Such ratings serve a useful function to provide program participants with an opportunity for direct input into the evaluation process. However, too many evaluators and program administrators interpret satisfaction ratings inappropriately, largely because they misunderstand their properties and influences. The purpose of this presentation is to dispel some myths about satisfaction ratings and to clarify their proper use and interpretation.

Table 1 illustrates some myths about satisfaction ratings and the corresponding realities.

**Table 1: Myths and Realities about Satisfaction Ratings**

<table>
<thead>
<tr>
<th>Myth</th>
<th>Examples</th>
<th>Reality</th>
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<tbody>
<tr>
<td>Satisfaction ratings have high threats to validity</td>
<td>Respondents give positive ratings because of fear of retribution</td>
<td>The preponderance of evidence supports convergent validity and suggests low threats to validity</td>
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<td>Satisfaction ratings show large effects of social desirability bias</td>
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<td>The expected satisfaction rating is the midpoint of the scale</td>
<td>Because distributions of ratings tend towards negative skew (i.e., means above the midpoint), the satisfaction of most participants is high</td>
<td>The expected satisfaction rating is more than 70% along the range of the scale</td>
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<td>Skew is an artefact of the response scaling</td>
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<td>Satisfaction ratings relate only to objective life domain conditions</td>
<td>Ratings are invariant with respect to personality and the passage of time</td>
<td>The ratings relate to mental well-being: negative ratings show positive change over time</td>
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Evidence to support the preceding assertions derives from an extensive literature on domain and life satisfactions. The findings that follow refer to satisfaction and well-being among undergraduates, elderly community and institution residents, and minority groups living in adverse conditions.

1. Validity and Threats to Validity

Findings from Canada and the U.S.A. on social desirability response set indicate low correlations with measures of life satisfaction and mental well-being. Because self-rated well-being correlates strongly with ratings by knowledgeable informants, the evidence supports convergent validity with low effects of social desirability bias.¹

Figure 1 shows lower life satisfaction among people living under different conditions. Because informant and self-ratings show comparable distributions, the latter evidence no reluctance to report forthrightly.

Figure 1: Life Satisfaction

2. The Typical Distribution has a Negative Skew

The distributions of satisfaction ratings typically have a negative skew. Figure 2 illustrates such skew in the mean of 11 domain satisfactions by undergraduates. The expected score is not the midpoint (i.e., 4) of the 1-7 scale but 70% along its length.

Negative skew is an arbitrary feature of scaling. Figure 3 shows the normalizing effects of exponential transformation.
3. Satisfaction Ratings Vary with Personality and Time

Findings dating to the 1920s show ratings of an affective event to become more positive with time. Recent evidence suggests that mental well-being is a stable feature of personality influenced by heredity. Life domain satisfactions reflect contributions by both objective conditions and personality. Figure 4 shows the proportions of variance in undergraduate grade satisfaction explained by grade point average and mental well-being. More of the variance owes to grade point average than personality.

![Figure 4. Explained Variance in Grade Satisfaction](image)

However, comparable analysis of satisfaction with overall education indicates higher variance explained by personality than by grades.

![Figure 5: Explained Variance in Educational Satisfaction](image)

These findings show the contributions by objective conditions and personality to vary with the specific satisfaction rated.
Related considerations apply to health satisfaction. Both objective health indicators (i.e., # illnesses, # drugs, # physician visits) and personality explained variance in health satisfaction in elderly community residents (Figure 6).

Figure 6: Explained Variance in Health Satisfaction

However, health indicators and personality made different contributions depending on the changing health status of respondents. Only the objective health indicators explained health satisfaction in residents with stable health status. Only personality explained health satisfaction in residents with worsening health status.

Table 7: Explained Variance in Health Satisfaction
Conclusions

- Satisfaction ratings provide a valid indication of a person’s satisfaction with life or the specified domain. Ratings by knowledgeable informants show similar distributions to self-ratings.

- Satisfaction ratings have a negatively skewed distribution. The mean rating typically lies beyond 70% along the range of the response scale – ratings below this interval usually indicate below expected levels of satisfaction.

- Contributions to satisfaction ratings include objective conditions relevant to the life domain and personality. The respective contributions vary with the life domain rated for satisfaction and may interact with individual differences relevant to that domain. Measures of mental well-being (e.g., life satisfaction) and objective indicators of life domain status should always accompany measures of domain satisfaction in any program evaluation in order to control statistically for their effects on life domain satisfactions.