Measuring Hierarchy of Basic Needs Among Adults

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Abstract

Although some instruments have been provided to measure needs in Maslow’s hierarchy, most of them either deal exclusively with one component or they do not measure all of the five basic needs. This study aims to develop a reliable scale measuring basic-needs-satisfaction for adults. A scale was constructed. The scale was administrated with 87 subjects. It is found that the scale to be a reliable and relatively valid scale to measure basic-needs-satisfaction.

Keywords: Maslow; Basic-Needs-Satisfaction; Scale; Hierarchy; Adults;

1. Introduction

The power of Maslow’s theory mainly comes from its accurate description of human motivation (Marshall, 2002). The hierarchy of basic needs seems to be the most powerful instrument to describe human motivation.

Despite to the contribution of Maslow’s theory in psychology, there are not many attempts to construct standard scales for measuring basic-needs-satisfaction. Although some instruments have been provided to measure needs in Maslow’s hierarchy, according to Goebel and Brown (1981) most of them “either deal exclusively with one component … or they don’t measure all of the five basic needs” and they are age population restricted (p. 810). According to Gowan (1974) most and best attempt to construct scales regarding basic needs, concerns to Shostrom. Shostrom called this scale as The Personal Orientation Inventory which is often referred to as the P.O.I.

Beside of above efforts, however, the variable of this study (basic-needs-satisfaction) apparently has not been considered to be measured – at least author of this research could not find. It is important to notice that basic-needs-satisfaction as is defined in this study is different with measuring self-actualization as P.O.I. does and with measuring all basic needs as what Goebel and Brown (1981) have done. Measuring basic-needs-satisfaction means measuring how much individual is satisfied in terms of basic needs.

As Goebel and Brown (1981) claimed, Maslow’s theory “suffers from vagueness of concept and looseness in language and because of the nature of the theory, defies empirical testing” (p. 811). Therefore, mainly this study chose to try to construct a scale.

The purpose of this study is to construct a reliable and valid scale measuring basic-needs-satisfaction among adults.

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2. Background

According to Cofer and Appley (1964, p. 692, cited in Goebel & Brown, 1981, p. 811), Maslow’s theory suffers from lack of operational definitions. Lack of empirical evidence for his theory might be the reason that his theory somehow left behind. There are a few efforts with regard to measuring basic needs. Brown (1976, cited in Goebel & Brown, 1981) designed a scale to study the differences in need levels across a wide age range of working and nonworking professionally trained women. Goebel and Brown (1981) developed a new scale based on Brown’s scale and called it Life Motivation Scale. It uses a series of five statements, including descriptive terms from Maslow’s writings, to represent the five need levels (physiological, safety, love, esteem, and self-actualization) for each of 11 life components (friends, free time, money, child rearing, family, activities, domicile, job, school, government, and health).

3. Methodology

**Instrument:** Life Motivation Scale is built to determine the prepotency of basic needs. This study employed the structure of this scale to develop a scale that includes all five needs. More careful looking into literatures and Maslow’s writings reveals that Maslow (1971) has added few more basic needs to his original five basic needs. Needs to know and to understand is one of the earliest ones. For a detailed argument about this need in Maslow’s writings please refer to The Need to Know and to Understand in Maslow’s Basic Needs Hierarchy (Saeednia, 2009). Therefore in this study the need to know and to understand was added.

A detailed discussion in Maslow’s and the deep analysis of basic needs as it is in Maslow’s writing (see Saeednia, 2011) was employed to give more validity to the items of this scale. This scale called Basic-Needs-Satisfaction Scale for Adults (BNSS-A) (To receive the scale, please email to the author).


To develop this scale, eight of major sources of satisfaction are selected: Friend, parents, spouse, leisure time, accommodation, job, school, government. The

**Data Collection:** Participants were asked to fill up the 62 items questionnaire. It was stated in the scale that these statements may express their needs. They have to determine how much of that needs is gratified for him. Items were positive. Each statement were ranked based on the percentage that they perceive satisfied from 0 to 100 percent.

They were advised to leave blank the statements that they believe do not refer to any of their needs. This trick may make the scale more reliable. Because based on Maslow, when some needs fully satisfied, it is no longer a need and if the individual is not relatively satisfied in lower needs, the higher needs may not emerge.

**Population:** A total of 87 adults from variant ages, genders, economy level, education background, and job were selected. Participants were 33 Men, 45 women, and 9 unknown; 19 undergraduate, 8 diploma, 36 Bachelor, 12 master, 1 PhD, and 11 unknown; with min 18 years old to max 48. The selection method was not fully random; however the variation may count sufficient. The groups that included were (1) Students of an English language center for adults, (2) staff of different departments of a school including primary, secondary, and admin, (3) volunteers people in a public park and a coffee shop, (4) volunteers teachers from five schools around Tehran Capital city, (5) and some other people who were from different areas and could not categorized under one name. The participants were staying in different part of Tehran and areas around it.

**Pilot Study:** In the first administration of BNSS-A with 27 subjects, the Alpha Chronbach of reliability was estimated at .973 which is superb. These subjects were not included in the main sample.
4. Findings

Data were entered to SPSS ed.16 software. The means of the scale estimates as 62.4. The means of each basic needs estimated as 60.53 for safety, 61.12 for self actualization, 63.22 for psychological, 64.23 for esteem, 65.23 for belonging, and 65.23 for needs to know (all out of 100).

The Cronbach’s Alpha coefficient of BNSS estimated as .967 which is superb. Reliability of sub-scales is shown in Table 1:

<table>
<thead>
<tr>
<th>Need</th>
<th>P</th>
<th>S</th>
<th>LB</th>
<th>E</th>
<th>SA</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>Cronbach $\alpha$</td>
<td>.800</td>
<td>.858</td>
<td>.748</td>
<td>.840</td>
<td>.886</td>
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</tr>
</tbody>
</table>

*Note. P: Physiological Needs; S: Safety Needs; LB: Love & Belonging Needs; E: Esteem Needs; SA: Self-Actualization; N: Needs to Know

Pearson Correlation coefficient between total score of BNSS-A and its items were all positive varied from .069 for item 30 to .750 for item 51. All correlations were significance at .01 confidences except items 54 and 50 which were significance at .05 confidences.

Correlations between BNSS-A and its sub-scales are presented in Table 2.

<table>
<thead>
<tr>
<th>N= 87</th>
<th>BNSS A</th>
<th>LB</th>
<th>S</th>
<th>E</th>
<th>SA</th>
<th>P</th>
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<tbody>
<tr>
<td>Sig.</td>
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<td>LB</td>
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<td>.803**</td>
<td>.675**</td>
<td>.723**</td>
<td>.660**</td>
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<td>.000</td>
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<tr>
<td>Sig.</td>
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</tr>
<tr>
<td>S</td>
<td>1.000</td>
<td>.784**</td>
<td>.786**</td>
<td>.712**</td>
<td>.684**</td>
<td>.684**</td>
<td>.000</td>
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<tr>
<td>Sig.</td>
<td>.000</td>
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<td>.000</td>
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<td>.000</td>
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<tr>
<td>E</td>
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<td>.721**</td>
<td>.745**</td>
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<tr>
<td>SA</td>
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<td>.628**</td>
<td>.748**</td>
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** Correlation is significant at the level .01 (2 tailed)

All correlations between sub-scales of BNSS and their items were significant at .01 except item 30 from safety sub-scale, which was .093.

There were no significant differences between BNSS-A scores in terms of sex, age, and education level of participants.

Factor analysis did not resulted in acceptable reduction in variables. The scale shows integrity and not limited components were extracted.

**Satisfaction Status**

According to table 1 the level satisfaction in all basic needs of participants is 62.41%. Moreover the needs separately are satisfied descending as 60.54% for safety, 61.12% for self-actualization, 61.32% for psychological, 63.22% for esteem, 64.23% for love and belonging, and 65.23% for need to know.

Comparing the means of consequent basic needs (S & SA, SA & P, P & E, E & LB, LB & N) through t-test shows no significant difference.
5. Conclusion

The percentage of basic needs of adults is estimated to be gratified 62.41%. This is quite less than what children of ages 9-11 was estimated as 85.67% as stated by Saeednia (2011). Comparing the needs separately also shows in both groups (adults and children) safety scored the minimum. This emphasizes the people's concern about their safety needs in the context of Tehran. Also, love and belonging scores the most (if the need to know to not consider as this need was put as an extra).

Another difference between the basic needs in children and adult is that basic needs for children seem more independent rather than adults. This conclusion is a result of comparing the outcome of factor analysis of the data of this study and the one for adults in the Saeednia's (2011) research. Based on this study factor analysis resulted nonsense number of factors as 12 where as the result of Saeednia (2011) indicates the limited numbers with sufficient loading variance.

BNSS-A could be known as a valid scale to measure the extent of satisfaction of basic needs, because it has superb internal consistency reliability. The sub-scales also are internally consistent. Also because sub-scales of BNSS present coherence since their reliability is high and inter items are positive.

Maslow (1970) has believed that basic needs are the ultimate goal of organization. He emphasized to this notion in his last interview (Hoffman, January-February, 1992). This indicates that BNSS-A is an indicator of life satisfaction. Researches (Oishi, Diener, Lucas, and Suh's , 1999 & Saeednia, 2010) state esteem is more associated with life satisfaction. Oishi, Diener, Lucas, and Suh's (1999) stated "satisfaction with higher needs, such as love and esteem needs, tended to be stronger predictors of life satisfaction in wealthy nations" (p. 988). These authors explained that "When individuals' lower needs are met, on the other hand, their life satisfaction is better predicted from satisfaction with higher needs such as love and esteem needs" (p. 988). They also believe that in poorer nations life satisfaction tends to be more associated with safety. Findings of this study show that safety has the most correlation with life satisfaction, although all needs have almost same association with life satisfaction (table 2). This indicated that Tehran most likely present the specification of poor places, despite the fact most people are high level in term of economy.

References