

**British Journal of Economics, Management & Trade**  
4(2): 173-182, 2014

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## Assessing Lower and Higher Order Needs: A Cross-Cultural Comparative Study

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### *Author's contribution*

*This work was carried out by the author RK. The author RK read and approved the final manuscript.*

**Original Research Article**

**Received 5<sup>th</sup> July 2013**  
**Accepted 16<sup>th</sup> October 2013**  
**Published 28<sup>th</sup> October 2013**

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### ABSTRACT

Clayton Alderfer proposed a framework of needs - existence, relatedness and growth – to simplify Maslow's hierarchy and enable the concept to be empirically verified. Alderfer's structure focuses on the individual and related individual needs to those things that a job or occupation could hope to satisfy. His framework was adapted and incorporated into the World Values Survey to measure respondents' views on the meaning and purpose of work. Four value rankings in the survey assess the purpose of work in terms of the income, job safety and security, the value of associating with people the worker might like, and a sense of importance a job or occupation can provide. The question asked by this research is whether lower (income and security) or higher (association and job importance) order needs are the stronger motivators. It was determined that there was no significant difference in the level of work motivation between those people who are driven by lower order needs and those who are driven by higher order needs. The results were consistent across fifty-six national surveys. Self-assessed levels of work motivation, however, varied by country.

*Keywords: Hierarchy of needs; work motivation; existence, relatedness and growth; purpose of work; meaning of work.*

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## **1. INTRODUCTION**

Two of the most highly cited need-based theories of motivation are those by Abraham Maslow [1] and Clayton Alderfer[2]. Maslow [1] described five layers of needs: physiological, safety, belongingness, esteem, and self-actualization; Alderfer[2] reduced these categories to existence, relatedness and growth and suggested that the layers were not strictly hierarchical. Both authors described categories of lower and higher order needs and while these needs could be interpreted in widely variant ways by individuals, they were nonetheless common to all people - innate parts of the human condition.

A more recent line of research investigated how people learn from and react to their socio-economic conditions. Steers and Sanchez-Runde[3] argued that work motivation derives from national culture, namely, that a person's self-concept includes values and norms about the nature of achievement, tolerance for ambiguity, etc. that are socially instilled. Further, they posited that "environmental factors" such as education, levels of prosperity and legal or regulatory systems help to shape behavior [3]. As nations move from economies characterized by scarcity to ones that are more economically secure, the primary reason people are motivated to work may shift from satisfying lower order to higher order needs [4].

This raises the question: In the more developed economies, are workers more strongly motivated by higher order rather than lower order needs?

### **1.1 A Brief Overview of Need-Based Motivation Theory**

Research on needs, as well as on intrinsic and extrinsic motivations has been carried out since the middle of the 19th century [5](see: Lagrange, 1854:57). Early research defined instinct [6],[7] or drive [8] as a collection of habits that are learned as a result of successful or unsuccessful prior experiences. Social activity was seen as the result of a confluence of drives (Woodworth, 1918:204), and the commonalities of intrinsic motivations among people were seen as defining human characteristics.

Of the two most commonly cited needs-based theories, one is hierarchical and the other compartmentalized and interactive. Maslow's [1] hierarchy of needs provides a step function. According to this theory, only when lower order physiological needs are met can a person begin to consider higher order needs. Maslow did explain, however, that the needs at the top of the hierarchy were not as distinct as the ones toward the bottom and that people may progress from one upper level step to the next even if the need at a particular level is not completely satisfied [1]. Maslow's [1] theory is universal and hierarchical; his contention was that while there may be variations in the degree to which a person may be interested in or capable of attaining any one of the levels of needs that he described, all of these needs were seen as innate.

Clayton Alderfer sought to correct the shortcomings of the Maslow study by simplifying the strata [2] and defining them in measurable terms. His study of approximately "110 persons working for a bank in upstate New York" [2] assessed three variables – the first, existence, is labeled a "lower order need," while "relatedness" and "growth" are termed "higher order needs" [2]. Alderfer did not explicitly describe the two categories as hierarchical; rather, he suggested that all orders of needs could be felt simultaneously and that any one category could gain a worker's primary attention at any given time. Moreover, they can be interactive. A person who is unable to attain a "growth" objective may be satisfied if he or she has

recognizable gains in a “relatedness” one, potentially as an indirect route to attaining the first objective [2].

While Maslow’s theory has been highly cited, the writing on which it is based has received criticism for its lack of a theoretical foundation [9], [10]. Perhaps the harshest criticism of the study came from Maslow himself when he wrote, “My work on motivations came from the clinic, from a study of neurotic people.... There were many things wrong with the sampling, so many in fact that it must be considered to be, in the classical sense anyway, a bad or poor or inadequate experiment.” [11]. Whatever failings its foundation may have had, however, Maslow’s concept as originally proposed, or as modified by Alderfer, continues to have some degree of intuitive appeal.

## **1.2 A Brief Overview of Work Motivation in a Socio-Economic Context**

At roughly the same time as early theorists had begun to explore instincts and drives, Weber was approaching work motivation as something that was derived from a religious or cultural context [12]. His contention was that religion and culture shaped behavior and that a motivation to work was a derivative of socially instilled beliefs, and he argued that as these beliefs were learned and reinforced in daily commerce by young members of the culture, they became ingrained and adopted as motivators.

The concept of motivation as a force, positive or negative, to be applied to a worker, was developed by Vroom in his Valence, Instrumentality and Expectancy (VIE) theory [13]. It assessed the impact of extrinsic motivations on workers who perceive themselves to have varying degrees of ability to perform an assigned task [13]. Motivating techniques, Vroom explained [14] would be most effective when the ability of the employee resulted in the task being neither too easy nor too difficult. Vroom articulated the role of expectancy in motivation. While the early psychologists had focused on the learning of patterns of activity as beneath the conscious, Vroom and MacCrimmon[15] interpreted this pattern as a cognitive activity – a person could make a conscious choice among alternative career decisions based on the likelihood of a desired outcome. Vroom’s own critique of VIE theory perhaps best characterizes its most significant limitation, namely, that it does not address how people become aroused to favor one goal over another[14].

VIE theory examines four aspects of motivation: effort, professionalism, the strength of the causal connection between a worker’s performance and the anticipated reward, and the emotional value to the worker of those rewards. Lawler and Porter [16] included an employee’s assessment of his or her own performance as a predictor of motivation and, on this basis, argued that employee satisfaction is a result rather than a cause of good performance. The list of predictors of work motivation was later expanded to include an employee’s level of self-confidence [17], and goal commitment [18].

Rokeach described the normative standards people use to choose among alternative behaviors as “values,” which he defined as “social indicators of the quality of life” [19]. This was a seemingly small but significant shift away from the term “work ethic,” a characterization that had framed much of the discussion of the meaning and importance of work since the first publication of Max Weber’s “Protestant Work Ethic and the Spirit of Capitalism” in 1904-5. The research suggested that work motivation derived from cultural influences might be viewed in an aspirational rather than in a compulsory sense [19].

Latham [20] convincingly argued that needs may be seen as condition precedents to the development of expectancies or goals; they underlie the incentive to learn contained in social-exchange or culturally-based theories. Further, by defining a list of “specific, measurable, attainable, relevant and time-bound” goals, a person may design specific actions needed to attain something he or she desires by direct or indirect means [21]. Social cognitive theory describes how observation of the behavior of others in select micro-environments can help a person to pattern his or her own behavior [22]. What these theories have in common is that they are premised on the idea that an individual’s behavior can be modified based on the observations that person makes of his or her environment. Expectancy, goal setting and social exchange theories have been applied to models of fit between a person and his or her job design/environment [23], as well as in job selection [24], in defining the job expectations of an aging workforce [25] and in assessing the impact of national culture on jobs [26], [3].

Steers and Sanchez-Runde [3] argued that work motivation derives from national culture, namely, that a person’s self-concept includes values and norms about the nature of achievement, tolerance for ambiguity, etc. that are socially instilled. Further, they posited that “environmental factors” such as education, levels of prosperity and legal or regulatory systems help to shape behavior [3]. Work motivation has been shown to be negatively correlated with advanced economic development and positively related to collectivism, uncertainty avoidance and power distance [27]. Finally, as countries shift from conditions of scarcity to those of security, the character of the value that people place on work shifts from “survival” to “well-being” [4].

The line of literature beginning with VIE theory and continuing through social cognitive theories develops the argument that setting expectations and forming goals is influenced by a socio-economic context. Expectations about the purpose and value of work are seen as being socially instilled, and the decision to pursue those goals is interpreted as a conscious and cognitive activity. This view of how goals are formed differs from that of the need-based theorists, who argued that needs are universal and innate. In order to test this comparative, two hypotheses are proposed:

- H1: Work motivation levels in developed countries will more closely associated with higher order needs than in less developed countries.
- H2: Work motivation in less developed countries will more closely be associated with lower order needs than in more developed countries.

## **2. METHODOLOGY**

To evaluate these hypotheses, data was drawn from the World Values Survey (WVS), a comprehensive survey assessing socio-cultural and political trends in 97 societies across six continents [28]. The survey tabulates the result of field interviews conducted by local field organizations under the supervision of academic researchers.

One of the questions in the World Values Survey [28] concerns the priorities that people might have in looking for a job. In the 1990 and 1995 waves of the survey, the question had eleven possible responses including: pay, hours, job security and time off to the amount of pressure felt on the job, the level of challenge and responsibility, its interest, opportunities and match to the worker’s abilities. The question came to its current format with the 2000 wave of the survey, which was replicated in the 2005 wave. The eleven possible responses were reduced to four, with several of the remaining seven possible responses appearing as

independent Likert-type questions elsewhere in the survey. The four remaining options include pay and job security, working with people one might like, and doing a job that is important.

The first two of these response options – pay and job security - have been mapped to Alderfer's "existence" needs, while the second two have been mapped separately to "relatedness" and "growth" [29]. While the World Values Survey does not provide a description of the theoretical bases of its questions, it is helpful to note that in describing the importance and effect of economic security in a post-modern world, Inglehart [4], explained evolving work values by referring to Alderfer's needs structure.

## **2.1 World Values Survey**

Two World Values Survey questions (2005 wave) were compared in analyzing the research question:

Question V8: [Work] For each of the following, indicate how important it is in your life. Would you say it is: (1) Very important, (2) Rather important, (3) Not very important, or (4) Not at all important.

Question V48: Regardless of whether you're actually looking for a job, which one would you, personally, place first if you were looking for a job: (1) A good income so that you do not have any worries about money, (2) A safe job with no risk of closing down or unemployment, (3) Working with people you like, or (4) Doing an important job that gives you a feeling of accomplishment. Note: A "don't know/can't decide" option was also given in both questions.

To facilitate the tabulations, the responses to question V8 were converted to an index. (See Appendix A). Answers to the question V8 were filtered by the answers to question V48. To determine the effect of economic development on these variables, data on GDP/capita was taken from the CIA World Factbook, 2011 edition [30]. The observations were assessed with a paired t-test, and a simple linear regression was run across the dataset to uncover any noteworthy trends.

## **3. RESULTS**

When the indexed value of lower order needs was compared with that of higher order needs on a country-by-country basis, the mean difference of the indexed value of lower (2.91) and higher (2.82) order needs was not found to be significantly different from zero. Approximately .883 of the variance in the indexed value of higher order needs could be explained by variances in lower order needs ( $r^2 = .883$ ;  $p < .001$ ). When measured at the national level, those who cited lower order needs as their primary motivators valued work equally with those who cited higher order needs as the first reason they would look for a job. The importance in life of work was negatively correlated with GDP/capita, albeit to a medium effect size ( $r^2 = .319$ ,  $p < .001$ ). Also, as shown in Table 1, GDP/capita was negatively associated with the percentage of the population who were seeking a job based on a lower order need, and positively associated with the percentage of the population who were seeking a job based on a higher order need:

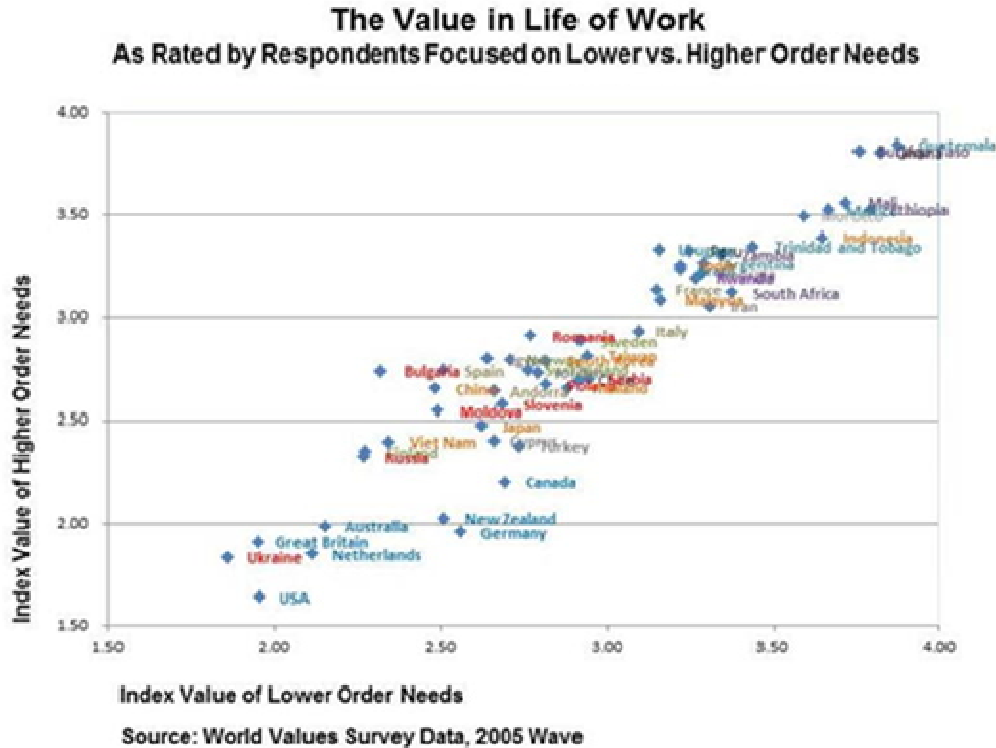
**Table 1. Correlation of GDP/capita with the reason people would seek work**

Correlation with GDP/capita	Positive/ Negative	Effect	r <sup>2</sup>	p value
A good income	Negative	Moderate	0.434	<.001
Job security	None	n/a	0.078	<.001
Working with people you like	Positive	Moderate	0.349	<.001
An important job/accomplishment	Positive	Strong	0.577	<.001

Sources: World Values Survey; CIA Factbook

#### 4. DISCUSSION

The relatively high degree of correlation (.883) between the value of lower and higher order needs suggests that the absolute level of motivation does not change as the needs on which a worker is focused shifts from lower order to higher order needs. Within countries, the absolute level of motivation is relatively constant.



**Fig. 1. Index of work motivation corresponding to higher vs. lower order needs values**

As shown in Fig. 1, on a country-by-country basis, the value of lower and higher order needs was seen as being approximately equal by people who selected either a higher or lower order need as their first consideration in looking for a job; however, the absolute level of the assessed value of work varied significantly from country to country. Whether rated by people who envisioned themselves as seeking work in order to satisfy a lower order need or a higher order one, respondents in the US and most Western European countries gave a

lower rating to the value of work than did respondents in South America, Africa and East Asia. Within countries, however, there was no significant difference in self-reported level of work motivation between those people who were driven by either higher or lower order needs. At a given level of economic development and a defined cultural setting, an absolute level of work motivation does not vary with the level of need being addressed. This suggests that cultural and economic influences are the primary determinants of the overall level of work motivation. As the level of work motivation for those who are primarily working to satisfy a lower order need is approximately equal to that for those who sought work to satisfy a higher order need in all countries surveyed, the overall level of work motivation seems to be more a function of socio-economic context than some more universal and hierarchical needs system.

Both hypotheses were supported. The data supports the contention that job seekers in highly developed countries are more focused on higher order needs than on lower order needs. Similarly, the expectation that people in more affluent countries would be less concerned about lower order needs than about higher order was demonstrated, but to a medium effect size.

## **5. LIMITATIONS AND CONCLUSIONS**

As with any cross-cultural survey based on Likert scale responses, what is measured may be affected by cultural biases in the way people respond to questions. More objective and verifiable measures of work attendance, for example, might produce results that show how committed people are to their work versus how important they feel it to be. Also, data was aggregated at the country level; these serve as proxies for cultural borders but do not map cleanly to them.

The above analysis does not necessarily disprove that “needs” form the basis of motivation. As Latham [20] described, “need-based theories explain why a person must act.” Need-based theories address the reasons why expectancies are developed, or goals are formed, or behavior is shaped. What is shown, however, is that the way in which needs are interpreted into specific goals or aspirations is very much shaped by socio-economic contexts – both in terms of the absolute level of work motivation and in the order of need that is most prevalent within national borders.

## **COMPETING INTERESTS**

Author has declared that no competing interests exist.

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## **APPENDIX-A**

The World Values Survey is comprised of a series of questions, generally calling for Likert-scale responses. For this analysis, the database was sorted by country and each country was treated as an individual respondent. The data was then sorted according by responses to WVS question V48 – the primary reasons why a person would seek a job, namely, (1) A good income so that you do not have any worries about money, (2) A safe job with no risk of closing down or unemployment, (3) Working with people you like, or (4) Doing an important job that gives you a feeling of accomplishment.

The combination of country and reasons for seeking a job created the database used for assessing the importance of work. For each combination of country and reason for seeking a job, the value of the response to WVS question Question V8 was measured. WVS Question V\* reads: [Work] For each of the following, indicate how important it is in your life. Would you say it is: (1) Very important, (2) Rather important, (3) Not very important, or (4) Not at all important.

As the results are reported in terms of the number of people responding “very important” or “rather important”, etc., an index was created to make the results comparable. “Very important” was assigned a “4”, “rather important” was assigned a “3”, etc. The index was calculated as the average score of all responses within the cross-tabulation of country and reason for looking for a job.

Finally, a distinction was made between the seeking a job to satisfy a lower order need (income and security) and a higher order need (association and achievement). The indexed value of lower order needs is the average score of the respondents assessing the importance of work who sought a job primarily to satisfy an income or security need; correspondingly, the indexed value of higher order needs is the average score of the respondents assessing the importance of work who sought a job primarily to satisfy an associational or achievement need.

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