

WORK VALUE AS MOTIVATION AMONG SOFTWARE PROFESSIONALS

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Abstract

A highly complex and well paid job is that of a software professional's. Moreover, it is said to be fairly a new and different work-setting. Job switching is also high among them. This field is relatively a new field and lacks value and motivational research on its workforce. This study provides a significant research support to this area of work. Specifically the study concentrates on the levels of work values among them and analyses their intrinsic motivational dynamics. The sample group consisted of 100 software professionals and was classified as people with high work value and low work value. Their scores, on the dimensions of intrinsic motivation, were analyzed by one-way ANOVA test. The results showed that people with high work value are internally motivated and vice versa. The findings of the study may have organizational and educational implications.

Keywords: Value, protestant work ethic, motivation, intrinsic motivation, software profession.

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1. Introduction

The present research aims to identify and delineate the value patterns, the motivational dynamics of software professionals. Specifically, the study focuses on the levels of the Work value with reference to Intrinsic Motivation. The Protestant Ethic, which, in this study, has been used synonymously with work value, refers to a set of values and belief system construed from the ethic and ideology of Calvinism (Max Weber, 1930). Work ethic is not a single unitary concept but a combination of attitudes and beliefs pertaining to work behavior. According to Max Weber (1930), they are value of time, trustworthiness in transaction, emphasize on hard work, integrity in business, meticulousness, judiciousness and thriftiness. Further increasing wealth with reduction of enjoyment will lead to success in business and earning of wealth, in fact, is the expression of virtue and proficiency in one's calling. This collection of work ethic constructs are multidimensional; relate to work and work activity in general and not to any particularly narrowed down idea of work. It is a learned behavior; especially secular not having any tie up to any religious belief system. The term intrinsic motivation refers to the desire to undertake an activity for no other reason than to perform the activity itself. It is thought that a higher level of intrinsic motivation will be established if people feel that their actions are self determined and that they provide a sense of personal competence (Halliwell, 1978). According to White (1959) people are driven by a need to be competent or effective in mastering all aspects of the environment. Successful attempts to master the environment intrinsically motivate further behavior. Interest/Enjoyment, Perceived Competency and Perceived Choice are considered to be positive predictors of Intrinsic Motivation (Ryan, 2001). Pressure and Tension are considered to be the negative predictors of Intrinsic Motivation. The Protestant Work Ethic is a value system and the Intrinsic Motivation is a motivational system and these two variables can best be understood if applied to the work setting. One of the highly complex and modern work settings is that of the software professionals', because, they deal with developing computer software that requires hard work, persistence, controlling the outcomes of their behavior. This field is relatively a new field and lacks value and motivational research on its workforce. This study provides a significant research support to this area of work.

1.1. Objective of the Study

The objective of the present investigation is to study Work value in relation to Intrinsic Motivation among the software professionals.

1.2. Research Question

Whether the high and low levels of work ethic subjects differ from one another on Intrinsic Motivation?

1.3. Hypotheses

Based on the above question the following hypotheses were made for statistical verification:

1.3.0. There will be no significant difference between the mean scores of high and low Protestant Work Ethic groups on the Intrinsic Motivation.

1.3.1. There will be no significant difference between the mean scores of high and low Protestant Work Ethic groups on Interest/Enjoyment dimension of the Intrinsic Motivation.

1.3.2. There will be no significant difference between the mean scores of high and low Protestant Work Ethic groups on Perceived Competency dimension of the Intrinsic Motivation.

1.3.3. There will be no significant difference between the mean scores of high and low Protestant Work Ethic groups on Perceived Choice dimension of the Intrinsic Motivation.

1.3.4. There will be no significant difference between the mean scores of high and low Protestant Work Ethic groups on Pressure/Tension dimension of the Intrinsic Motivation.

2. Method

2.1 Instruments

The following instruments were used to collect the relevant data in the present study.

The Protestant Ethic Scale (Mirels And Garret, 1971): The Protestant Ethic Scale (PES) has been developed by Mirels and Garret during 1971. It aims to measure the work value of the individual in terms of accepting Max Weber's (1930) idea about the Protestant Ethic as a dispositional variable. It contains 19 attitude statements.

The Intrinsic Motivation Inventory (Ryan, 2001): The Intrinsic Motivation Inventory (IMI) was developed by Ryan in the year 1991 to measure the intrinsic motivation of the individual by four dimensions, viz., Interest/Enjoyment, Perceived Competency, Perceived Choice and Pressure/Tension. The author developed different models of the Intrinsic Motivation Inventory consisting of different number of items. In the present investigation the 22 items inventory has been used.

2.2. Pilot Study

A pilot study was conducted prior to the main study in order to confirm the practicability of the data collecting procedure; to evaluate the instrument chosen for the study; and to ascertain the reliability and validity of the instruments used in the study.

2.2.1. Sample for the pilot study

For the purpose of the pilot study, 15 male and 15 female software professionals were randomly selected by the investigator from a reputed software company situated in Chennai and constituted as sample for the pilot study. The age range of the sample is 23-28 and their educational qualification is under graduation in Computer Engineering.

2.2.2. The results of the pilot study

The pilot study was conducted with the specific objectives mentioned above. The results of the pilot study are presented below. The responses given by the subjects of the pilot study to the different scales were analyzed along with the feed back. The Split-Half method was used to determine the reliability co-efficient of the instruments. The items in each scale of the instruments were split into two halves in terms of odd-even method to find out the split-half reliability co-efficient. These two scores were correlated by using product moment correlation. The correlations, thus, obtained were correlated by using Spearman-Brown Prophecy formula (Garett, 1985) to arrive at the co-efficient of reliability. The resulting correlations and reliability co-efficients are presented in table 1.

Insert Table 1 about here

The reliability co-efficients indicate that their scales are reliable for the study. Most of the dimensions of the scales are having reliability co-efficient equal to 1. This indicates that the instruments are highly reliable. The pilot study proved the worthiness of the instruments studied, their procedure of administration

and scoring pattern. The easy understanding of the items in the scales and their high reliability paved the way for including these scales as valid tools to assess the subjects in this study.

2.3. The sample for the Main Study

The sample consisted of 100 software professionals working in various software companies situated in Chennai. Their mean age was 27.4. Their educational qualification was undergraduate engineering degree in Computer Software. Among them 60 were males and 40 were females.

2.4. Construction of the criterion groups

For the construction of criterion groups the scores of the subjects on Protestant Ethic Scale were ranked. Based on the median scores of the subjects on Protestant Ethic Scale, the subjects were separated and formed the high and the low criterion groups. The criterion groups were compared with their scores on intrinsic motivation by using analysis of variance statistics procedure.

2.5. Statistical Analysis

The nature of the study necessitated to find out the possible differences and similarities between the two groups of subjects. Hence, One way analysis of variance statistical technique was used to analyze the data collected. Using this technique the High and the Low Protestant Ethic Groups were compared with the scores of Intrinsic Motivation and I-E Locus of Control.

3. Results and Discussion

3.1. Comparison of the high and the low protestant ethic groups on intrinsic motivation

In order to test the hypotheses that there will be no significant difference between the mean scores of the High and the Low Protestant Ethic groups on the Intrinsic Motivation Inventory, the scores of the High and the Low Protestant Ethic Groups on Interest/Enjoyment dimension of the Intrinsic Motivation Inventory were subjected to One way analysis of variance. The results of the description of the sample are given in table 2 and the one-way- ANOVA on the four dimensions of Intrinsic Motivation Inventory, namely, Interest/Enjoyment, Perceived Competency, Perceived Choice and Pressure/Tension is summarized in table-3.

Insert Table 2 about here

Insert Table 3 about here

The results of the present study shows interesting findings that there exist significant differences between the High and the Low Protestant Work Ethic Groups (PWE) in Interest/Enjoyment, Perceived Competency, Perceived Choice and Pressure/Tension dimensions of Intrinsic Motivation Inventory which means both the Group differ from one another in all the dimensions of Intrinsic Motivation Inventory. This indicates that people who have high work ethics, which is measured by the Protestant Ethic Scale, are motivated by

intrinsic motivation. It can be understood from the mean scores as the high PWE group has scored higher mean scores in the positive predictors of Intrinsic motivation, viz., Interest/Enjoyment, Perceived Competency, and Perceived Choice dimensions but lower scores in Pressure/Tension dimension which is considered to be negative predictor of Intrinsic motivation. According to Ryan (2001) intrinsic motivation occurs when the individual is highly interested in the activity he/she is doing; he/she feels competence on finishing the task successfully; he/she perceives that he/she is left with choices to select the task himself/herself and is not forced or coerced to do the task; while doing the task he/she is not forced by external pressures which would create tension and anxiety. Hence, it could be said that people of High Protestant Ethic are intrinsically motivated and are not easily affected by external forces. This finding is supported by Furnham (1990) who proposed that persons with a High Protestant Work Ethic are industrious, ambitious, hard working and intrinsically motivated. People with low Protestant Work Ethic are basically the opposite: they are not hard working, easily distracted and extrinsically oriented. People who have higher levels of these work values would be giving greater importance to hard work and pleasure in doing so. Since they will be highly industrious and dedicated in their activities, they, in turn, will get induced to physical activity and will perceive the activity interesting and challenging and also feel highly satisfied in performing the activity. Such a person will have greater levels of intrinsic motivation (Boyd, et.al.,2002). The subjects who have secured greater levels of Protestant Work Ethic are also found to have greater levels of Interest and Enjoyment in their activities. They all seem to have clear perception of that they have enough competencies in doing their work. They also show ability in identifying the choices available to them in their nature of activities. And they do not experience pressure and tension in performing day to day endeavors. The host of these qualities is nothing but the characteristics of highly intrinsically motivated persons. (Ryan, 2001, Cuddihy et al., 2001). On the contrary subjects who have lower levels of Protestant Work Ethic seem to have lesser degree of intrinsic motivation. The Protestant Work Ethic and the Intrinsic Motivation have close relationship. Both are complement to each other. People with low levels of Protestant Ethic will have lesser interest and enjoyment in their work; will perceive lower levels of competency; will find lesser choice available to them and also highly pressured, tensed. These feelings are considered to be the negative predictors of intrinsic motivation (Ryan, 2001).

4. Conclusion

The results of the study led to the following findings. The High and the Low Protestant Ethic Groups differ from one another on Intrinsic Motivation. The High Group has got higher Intrinsic Motivation than the Low Protestant Ethic Group has i.e. The High Group has got higher Interest/Enjoyment, perceived competency, perceived choice, but lower pressure/tension than the Low Protestant Work Ethic Group. In the recruitment of the software professionals the company adopts various methods. The results of the present study suggest that work value may be used as one of the assessment criteria for the recruitment of the software professionals. If high work value person is selected he will have greater levels of intrinsic motivation which in turn will influence the effectiveness of his profession. Normally, the software companies conduct training programmes to the new recruits. The work value training should be included as one of the components of the programmes which will enhance the performance of the new recruits.

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SN	VARIABLES	CORRELATION OBTAINED BETWEEN TWO HALVES	RELIABILITY CO-EFFICIENT
1	PROTESTANT ETHIC SCALE	0.78	0.87
2	INTRINSIC MOTIVATION INVENTORY		
2.1	INTEREST/ENJOYMENT	0.82	0.90
2.2	PERCEIVED COMPETENCE	0.68	0.81
2.3	PERCEIVED CHOICE	0.56	0.72
2.4	PRESSURE/TENSION	0.72	0.83

TABLE 1: CORRELATION AND RELIABILITY CO-EFFICIENT OF THE PROTESTANT ETHIC SCALE AND INTRINSIC MOTIVATION INVENTORY.

DIMENSION	GROUPS	N	M (SD)
INTEREST / ENJOYMENT	High	50	34.34 (7.95)
	Low	50	29.68 (8.19)
PERCEIVED COMPETENCY	High	50	24.70 (4.75)
	Low	50	21.24 (4.89)
PERCEIVED CHOICE DIMENSION	High	50	24.78 (3.87)
	Low	50	20.92 (3.19)
PRESSURE/TENSION DIMENSION	High	50	13.42 (5.87)
	Low	50	18.88 (6.60)

TABLE 2: HIGH AND LOW LEVELS OF PROTESTANT WORK ETHIC ON INTRINSIC MOTIVATION

DIMENSION	SOURCE	SSQ	D.F	MSQ	F
INTEREST/ENJOYMENT	Among	542.89	1	542.89	8.34*
	Within	6380.10	98	65.10	
	Total	6922.99	99		
PERCEIVED COMPETENCY	Among	299.29	1	299.29	12.88*
	Within	2277.62	98	23.24	
	Total	2576.19	99		
PERCEIVED CHOICE	Among	3720.49	1	372.49	29.58*
	Within	1234.26	98	12.594	
	Total	1606.75	99		
PRESSURE/TENSION	Among	745.29	1	745.29	19.04*
	Within	3835.46	98	39.14	
	Total	4580.75	99		

* p<0.01

TABLE 3: DIFFERENCES BETWEEN THE HIGH AND THE LOW PROTESTANT ETHICS ON INTRINSIC MOTIVATION