The Relationship between Five Factor Personalities and Alienation to Work of Nurses in Teaching and Research Hospitals

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ABSTRACT

The aim of this research is to analyze the relations between personality traits and work alienation. This cross-sectional was carried out among nurses who work in teaching and research hospitals. A total of 600 (547 women/53 men) people participated in the study. The "Personal Information Form" was developed by the researcher, the "Work Alienation Scale" developed by Mottaz (1981), The "Five Factor Personality Features Scale" developed by John et al (1991), were also used. These are applied to the nurses which form the sample of the research. In the evaluation of the data; frequency analysis, correlation analysis, structural regression and path analysis were used. In the neurotic personality of personality traits of nurses had an influence on dimension of meaninglessness of work alienation and five other personality traits were found to have no significant effect on work alienation.

Keywords: alienation, five factor personality, neurotic, nurse education, teaching hospitals

INTRODUCTION

As a result of modernism, organizational approach towards individuals has caused problems in terms of spiritual, social, cultural and economical types of alienation (Elma, 2003). The work life and conditions are important factors to the determination of the employee's behaviour against the organization and his job which employee is involved in. Studies on nurses has shown that organizational commitment and performance of nurses who are provided a positive work environment and feel support of their manager has increased. It has found that nurses who are in a negative work environment or the ones without manager support, eventually lose their job satisfaction and alienated to their work in time (Çetin, 2008).

According to Seeman (1959), alienation is a five-dimensional living concept which differs according to individual expectations, attitudes, behaviours and social-psychological status. Bastas (2016) developed another scale which measures "Teacher's Burnout Scale" to find out the burnout levels of the teachers. His work similarly stated a correlative relation between organizational commitment and burnout concept.

As individuals have different genetic, cultural and social characteristics, their behaviours against stimuli has also shown discrepancy. Because of this reason, it may be different for individuals who possess different personality characteristic to exhibit their sense of alienation to their work. (Kanungo, 1982). For example, presenting wine to an employee on his/her birthday by his/her organization can increase the organizational commitment of the employee while being able to reduce other employee's organizational commitment because of contradiction to his/her belief and it may cause the alienation of the individual (Tekin, 2012).

Contribution of this paper to the literature

- It was found in the study that the neurotic personality possess a positive and statistically meaningful effect on alienation of nurses.
- Alienated nurses may fail in working under special circumstances such as uninterrupted service, shifts, duty and performing a job which has the obligation to serve sick individuals and has high-stress.
- It can be said that the teaching and research hospital nurses live self-estrangement status as well as finding their work crucial.

RESEARCH METHOD

This study is a cross-sectional study to realize the effect of nurses' personality characteristics on their status of alienation to work.

The research consisted of all the nurses who work in teaching and research hospitals in Istanbul. In determining the size of the sample, being a teaching or research hospital was taken into account and it was paid attention that the number of nurses to be at least 200 in these hospitals. Two public and one private teaching hospital were identified by simple random sampling method. In this study, reaching a minimum of 375 nurses was aimed with 95% confidence level, the level of representing the universe was similar in other studies (Naing, Winn and Rusli, 2006). Surveys were distributed to a total of 620 nurses working at Şişli Etfal Teaching and Research Hospital and Okmeydanı Teaching and Research Hospital which are in public hospital status as well and the Group Florence Nightingale Hospital which is in the status of private research hospital and 600 surveys filled in total.

Data Collection Tools

Personal information form

Personal information form was created by researcher with sociodemographic characteristics such as gender, age, marital status, educational status, the organization where he/she works, department / service where he/she works, professional experience and tenure, job title.

Alienation scale

In this study, a three-dimensional alienation scale based on the five dimensions developed by Melvin Seeman and adapted to the Turkish by Uysaler was used by Mottaz (Mottaz, 1981, Uysaler, 2010). Scale consists of three dimensions and 21 questions included meaninglessness (7 questions), self-estrangement (7 questions) and powerlessness (7 questions). The scales were scored according to the 5-point Likert type (strictly disagree (1), disagree (2), undecided (3), agree (4), strongly agree (5)). Within the scope of the study, Confirmatory Factor Analysis (DFA) was performed to confirm the factor structure of the scale and as a result of the improvements made, the acceptable harmony was reached in the Modified Model ($\Delta\chi^2/sd$ = 4,934; RMSEA = 0,081; CFI = 0,747; GFI = 0,892; RMR = 0.103). The reliability coefficient of the scale (0.70) was found to be reliable.

Five factor personality features scale

In the study, five factor personality scale developed by John, Donahue and Kentle and adapted by Alkan to Turkish was used (John, Donahue, Kentle, 1991, Alkan, 2007). Scale consists of five dimensions and 44 questions in total including emotional imbalance (8 questions), extroversion (9 questions), compatibility (9 questions), responsibility (9 questions) and explicity (9 questions). The scales were rated according to a 5-point Likert type (no fit (1), not fit (2), unstable (3), fit (4), very fit (5)) ratings. In order to confirm the factor structure of the scale, DFA was performed and as a result of the improvements made, ($\Delta\chi^2/sd$ = 4,993; RMSEA = 0.082; CFU = 0.665; GFI = 0.761; RMR = 0.072 was found in the Modified Model. The reliability of the scale (0.86) was found as high.

Statistical methods used in study

Pearson Moments Multiplication Correlation Analysis was performed in order to determine whether there is a relationship between work alienation and personality characteristic in the direction of the purpose of the study. Structural Regression and Path Analysis were performed to determine the effect of personality characteristic on work alienation. Also; Frequency analysis was performed for socio-demographic data such as age, gender, professional experience. SPSS 21.0 package program was used for frequency analysis of data, evaluating descriptive

Table 1. Modified Alienation Scale Subdimensions, Metrics Measuring Dimensions, Averages and Standard Deviations

No	Dimensions	Metrics Measuring Dimensions	Averages	Standard Deviations
1	Powerlessness	1-2-3-4-5-6-7	2,6	1,04
2	Meaninglesness	8-9-10-11-12-13-14	3,4	1,10
3	Self-Estrangement	15-16-17-18-19-20-21	3,0	1,11

Table 2. Modified Five Factor Personality Features Scale Subdimensions, Items Measuring Dimensions, Averages and Standard Deviations

No	Dimensions	Metrics Measuring Dimensions	Averages	Standard Deviations
1	Extraversion	1-3-4-11-14-15-20-30	3,82	0,87
2	Compatibility	7-12-16-21-22-31-33-36-42	3,90	0,91
3	Responsibility	10-13-18-23-27-34-40-41-43	3,37	0,92
4	Emotional Imbalance	8-9-19-25-29-32-37-38	3,13	1,17
5	Explicity	2-5-6-17-24-26-28-35-39-44	3,96	0,82

statistics, reliability analysis and correlation analysis, AMSS 23.0 package program was used for confirmatory factor analysis and structural regression analysis.

FINDINGS

Findings Related to Demographic Data

91.2% of the participants are female, 59.3% are single, 79.3% are service nurses and 20.7% are clinical nurses. 52.7% of the participants are working in surgical units and 45.3% of them have bachelor's degree. The average age of the participants is 29. Participants have an average of 6 years professional experience.

Findings of the Alienation Scale

Within the study, the DFA was used to verify the factor structure of the alienation scale for which validity and reliability were established. According to DFA results; as a result of improvements in the alienation scale, acceptable conformity structure is observed in the Modified Model ($\Delta\chi^2$/sd = 4,934, RMSEA = 0,081, CFI = 0,747, GFI = 0,892, RMR = 0,103).

Table 1 shows the subscales, item numbers, average and standard deviations of the scale, which are validated as a result of the analyzes and assured.

In the **Table 1**, the average and standard deviation values are shown according to the dimensions of the alienation scale. Accordingly, the general average value of the alienation scale is calculated as 3.0 (s.s. = 1.08). This value indicates that the questions are generally answered as "undecided".

Findings Related to the Five Factor Personality Characteristics Scale

According to DFA results which are performed in order to verify Factor structure of Five Factor Personality Characteristics Scale with validity and reliability, ($\Delta\chi^2$/sd = 4,993, RMSEA = 0,082, CFI = 0,665, GFI = 0,761; RMR = 0.072) acceptable adaptation structure was shown in the Modified Model, as a result of improvements in Five Factor Personality Characteristics Scale.

The subscales, item numbers, average and standard deviations of the scale validated as a result of the analyses made and provided with reliability are given in **Table 2**.

In **Table 2**, the average scores according to the Five Factor Personality Characteristics Scale dimensions and scale items is seen, and the overall average score was calculated as 3.63 (s.s. = 0.93). It is seen that the highest score 3.96 (s.s. 0.82) is given to the explicity dimension.

Findings of Correlation Analysis Result between Work Alienation and Personality Characteristics

Nurses' correlation analysis findings related to the relationship between alienation and personality characteristics take part under this chapter.

Correlation analysis was performed to determine whether there is a relationship between personality characteristics of nurses and alienation and sub-dimensions of work. As a result of the analyzes made; there is no meaningful relationship between the dimension of the meaninglessness of the alienation and the responsibility,

Table 3. Findings of Correlation Analysis between Work Alienation and Personality Characteristics

Nu	Dimensions	Meaninglessness	Powerlessness	Self-Estrangement
1	Extraversion	-.054	.061	-.052
2	Compatibility	-.052	-.157**	-.004
3	Responsibility	-.007	.051	-.094*
4	Emotional Imbalance/ Neuroticism	.120**	.218**	.106**
5	Explicity	-.127**	-.090*	-.057

Table 4. Work Alienation Path Analysis Results with personality characteristics

Five Factor Personality Features		Work alienation	Regression Coefficient (β)	S.H.	P
Extraversion	→	Meaninglessness	-.436	.428	.308
Emotional Imbalance/Neuroticism	→	Meaninglessness	.653	.278	.019
Explicity	→	Meaninglessness	-.346	.769	.653
Responsibility	→	Meaninglessness	.709	1.329	.594
Compatibility	→	Meaninglessness	-10.918	44.507	.806
Extraversion	→	Powerlessness	-.124	.164	.450
Emotional Imbalance/Neuroticism	→	Powerlessness	.017	.085	.839
Explicity	→	Powerlessness	.261	.297	.380
Responsibility	→	Powerlessness	.016	.509	.987
Compatibility	→	Powerlessness	-.349	6.514	.957
Extraversion	→	Self-Estrangement	.119	.747	.874
Emotional Imbalance/Neuroticism	→	Self-Estrangement	.217	.390	.578
Explicity	→	Self-Estrangement	1.891	1.421	.183
Responsibility	→	Self-Estrangement	-1.534	2.419	.526
Compatibility	→	Self-Estrangement	-18.842	77.120	.807

extraversion and compatibility (r= -.007, r= -.054, r= -.052, p>.05) dimensions of personality characteristic and there is a negative and low-level relationship (r = -.127, p <.01) between the emotional unbalance/ neuroticism (r = .120, p <.01) and there is a negative and low-level meaningful relationship between openness dimension (r = -.127, p <.01).

While there is no statistically meaningful relationship between powerlessness and extraversion and responsibility (r = .061, r = .051, p> .05), there is a negative low-level relationship between explicit dimension (r= -.090 p<.05) and compatibility dimension (r= -.157, p<.01) and there is a positive low-level meaningful relationship with emotional imbalance/ neuroticism dimension (r = .218, p <.05).

While there is no meaningful relationship between self-estrangement, extraversion, compatibility and explicity dimensions (r= -.052 r= -.004, r= -.057, p>.05), there is a negative and low-level relationship with responsibility dimension (r= -.094, p<.05), there is a positive and low-level meaningful relationship with emotional imbalance dimension/neuroticism (r = .106, p <.01).

Findings of Nurses' Personality Characteristics and Work Alienation Path Analysis

Using the structural model developed to determine the effects of personality characteristics on work alienation patterns, path analysis was performed with the help of the AMOS package program and the results are given in **Table 4**.

The goodness of compatibility index of the structural model is found as $\Delta\chi^2/sd$= 3.820; RMSEA = 0.069 RMR = 0.078; CFU = 0.612; GFI = 0.735.

When **Table 4** is examined, it is found that there is a positive, semi-level and meaningful effect on the meaninglessness of emotional imbalance / neuroticism. The alienation of the five other personality traits of the positive, middle, and meaningful effects (ß = -. 653, p <.05) on the meaninglessness of emotional imbalance / neuroticism while the other five factor personality characteristics have no meaningful effect on alienation.

DISCUSSION AND CONCLUSION

In this study, it is aimed to examine the effect of five factor personality characteristics on work alienation. As a result of the research, it was found that the neurotic personality possess a positive, semi-level, statistically, meaningful effect on the meaninglessness of alienation dimension. Other personality characteristics did not have a meaningful effect on work alienation.

The nurses gave the highest value in the five-factor personality scale to the explicit dimension in the survey. From this point, it can be said that the nurses have seen themselves as open, enthusiastic, honest, plain and unpretentious. On the other hand, when lowest scores by nurses were evaluated, it was determined that they did not accept the neurotic personality dimension. It can be said that nurses who try to do nursing profession conform to the required profiles which they must have. Because nurses are always concerned with a sensitive group such as patients and their relatives. It is very important to show consistent behavior. Otherwise, many problems may occur. Moreover, according to the scale of alienation, nurses find their work significant, and when the lowest score of them was evaluated, the nurses did not find their salaries satisfactory. Therefore, it can be said that the nurses live self-estrangement status as well as finding their work meaningful.

The results obtained in the study overlap with similar research results related to the topic in the field. In a study on the personality traits of the hotel employees and their alienation to work; when personality characteristics of the employees were examined in general and evaluated, it was found that the highest average was the explicity characteristic and the lowest average was the emotional imbalance/neurotic dimension. This situation is similar to the result of our study. In the study examined the effect of the personality traits of the pharmaceutical company employees on organizational communication, meaningfulness was found between the responsibility dimension of the individuals and the communication dimension of the managers. Meaningfulness was also found between emotional balance situations of employees and communication dimension of managerial staff. According to results found from here, as the emotional balance and sense of responsibility of the employee increase, the convenience of communication with the management cadre is also increasing. In addition, as the level of explicity increases, the organizational communication policies are evaluated as more positive (Erkoç, 2008). As it is determined in this example, in occupational groups such as nursing profession, which are in intensive communication with people, we can say that explicity, responsibility and emotional balance are important.

Neuroticism is defined as the absence of an individual's emotional balance or negative psychological compatibility. This dimension shows the consequences of individual's emotional balance. Otherwise, it states the compatibility status of individual's personal relations (Trouba, 2007). Lounsbury and colleagues (2009) have stated that the individual exhibits neurotic personality characteristics when he is under extreme stress or oppression. Behaviors exhibited by individuals who have neurotic personality characteristics are undesirable behaviors. (Perry, 2003). These individuals are not successful in resolving problems and unable to take the right decisions, tend to get away from their position when they meet the difficulties. The individuals who has these characteristics may live work alienation status. It is an unwanted situation for nurses to have this kind of personality. Because nurses who have this characteristic may not be able to perform their duties and may alienate to work due to special circumstances such as uninterrupted service, shifts, duty and performing a job which has the obligation to serve sick individuals and has high-stress. The post-test results of Happell (2008) demonstrate a strong and statistically significant increase in the popularity of psychiatric nursing and the educational precautions in the field. It is argued by Duffield et.all (2001) that their teaching at unit levels of hospitals should focus on their role as leader, mentor, preceptor and coach.

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