

Received: December 2023 Accepted: January 2024

DOI: <https://doi.org/10.58262/ks.v12i2.278>

The Assessment of Satisfaction among the Medical Practitioner's Over Other Works Impacting their Job

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Abstract

Background: The medical practitioner's today are working under tremendous pressure. A lot of changes are taking place in their working environment. Many times Doctor develops a feeling of discontentment with their work. Hence it was considered as a necessity to understand their level of job satisfaction. Aim: It is very important in the interest of whole healthcare sector, that the Doctors should be satisfied with their work. This can be directly related to quality of service and patient satisfaction. In this paper an attempt has been made to understand Doctors satisfaction. Method: A questionnaire has been developed containing various dimensions of quality. The study is based on primary data; data has been personally collected from various doctors of different hospitals. Result and Conclusion: Doctor's satisfaction with the administrative procedures and respect for the specified working hours plays a significant role in satisfaction, Work Pressure, Patients and their attendants are too demanding, respect from peers, and support from staff. As these items are significant in explaining the differences between those who are satisfied and those who are not satisfied, the study recommends improving upon these items to increase the satisfaction level of doctors.

Introduction

Medical practitioners' working lives are profoundly changing and will change even more over the years. Various structural modifications have occurred in the medical profession over many years (Price D et al., 1999). Despite of the exhaustive characteristics of their caring work, medical practitioners used to have great liberty in their job conditions and had respectable financial returns, insurance, and safety at work (Freidson E, 1970). Job satisfaction in the healthcare setting is an important indicator of the quality of healthcare services offered by healthcare workers to their patients. (Alotaibi, AHM et al, 2022).

There has been a developing motion of discontentment with the work itself in most areas all over the world (Kassirer JP, 1998), (Birchard K, 2000), (Smith R, 2001), (Haas JS, 2001), (Hann M et al., 2011). The physician's satisfaction concerning his work is in the interest of the healthcare as a whole (DeVoe J et al., 2002); several factors are related to the physician's satisfaction. It must be a balanced approach.

The physician's job satisfaction is a pleasurable or positive emotional state resulting from reviewing or valuing one's job experience or skills. The work experience and the professional organizational state of affairs greatly impacted the satisfaction⁹ (Locke EA, 1976).

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It is a consequence or a response that can be perceived from several aspects, including cognitive and affectional or emotional elements (Locke EA, 1976) (Sachau DA, 2007). Physician satisfaction is a critical caliper or determinant of their well-being (Wallace J.E. et al., 2009).

It relates positively to quality of care and patient satisfaction. It encourages more careful prescription or authoritative conduct, suboptimal patient care practices, and a lesser probability of errors to a great extent (DeVoe J et al., 2002) (Cooper CL et al., 1989). The positive job satisfaction force may reflect an economic parameter for society. (Cooper CL et al., 1989) and (Williams ES et al., 2007). The weak psychological state of a physician after exhaustive work makes him more liable for medical errors that cause damage or death. (Williams ES et al., 2001). The factors modulating job satisfaction can be internal and external (Locke EA, 1976).

The internal factors link to psychological attributes/ mental evaluation of the job (quality, competence, and acknowledgment and acceptance). The external factors are associated with the job's safety (remuneration, working hours, and atmosphere). Considering the importance of job satisfaction to medical practitioners' welfare and quality of care, it is essential to investigate factors contributing to or decreasing job satisfaction (DeVoe J et al., 2002). The medical practitioner's dissatisfaction with the health system in which they perform or function is a leading problem in many countries (Smith R, 2001) and (Williams ES et al., 2001). The dissatisfied medical practitioners may be more likely to cut down their duty hours, seek other activities, and quit their jobs as early as possible (Kravitz RL, 2012) & (Williams ES et al., 2001), (Williams ES et al., 2007), (Misra-Hebert AD et al., 2004) and (Leigh JP et al., 2009). It can also be correlated to a bringing down patient remedial support care, deterioration in the quality of care, faulty prescription, and enhanced medical errors, which can put a stake to patient safety and security (Leigh JP et al., 2009), (Gundersen L, 2001) and (Mutale W et al., 2013), The causes of job dissatisfaction are multiple and complex.

The several causes of medical dissatisfaction or discontentment with the work can be intrinsic and extrinsic. The intrinsic causes include lack of social prestige and professional and economic appreciation, loss of liberty, personal conflicts, family conflicts, and work and medical wrongdoing threats. The extrinsic causes include cuts in financial earnings, the burden on the job, time pressure, patient-doctor relationships due to decreased appointments, changes in professional organization and management in job settings, etc. (Holger Gothe et al., 2007).

The literature focusing on the influence that a change in working conditions and the professional complacency of healthcare physicians had on healthcare conditions for patients is very little. Moreover, how fascinating the work of a physician is perceived to be so far has also yet to be reviewed in detail.

Despite the wide range of research regarding factors affecting physician satisfaction or dissatisfaction in different countries, more literature reviews need to analyze and summarize current evidence.

Literature Review

Job satisfaction among employees is important in every workplace including healthcare (Al-Jumaili AA, et al, 2023). A study conducted by (Kalantan K A et al., 1999) on Primary health care physicians in Riyadh showed a lot of stress and dissatisfaction in primary health care physicians. One of the main reasons for this was the workload, inadequate incentives, inappropriate work hours, unsuitable working hours, and lack of incentives. Some primary

health care physicians even have the problem of inadequate training. (Hani M et al., 2019), they conducted a job satisfaction study on doctors in Riyadh's academic medical center. The study's outcome shows that many doctors suffer from burnout. Long working hours and parenthood issues could be the reason for this burnout—also a study in a Saudi Arabia tertiary hospital. The study shows that a doctor's social life, lifestyle, and family life are essential factors in a doctor's choice of specialization, and these three aspects play an essential role in job satisfaction. A study conducted by (Bahnassy AA et al., 2016) shows that doctor's satisfaction is linked to the success of the Tertiary Care Center and the quality of services offered. Job satisfaction of doctors is directly associated with the working environment, factors such as vacation leave, sick leave policy, and family retirement plan benefits (for Saudis), disability benefits, salary. More organized and effective efforts should be implemented aiming at protecting medical practitioners, physical and mental wellbeing, enhancing their working conditions, and raising awareness about burnout and how to manage it (Alrawashdeh HM et al, 2021).

A study by (Alkassabi OY et al., 2018) analyzed the satisfaction of physiotherapists in Government and private hospitals. The study's results were surprising; according to the study, most physiotherapists were neither fully satisfied nor entirely dissatisfied with their jobs. However, the satisfaction level of female doctors was slightly higher than their male counterparts. Another study conducted in Saudi Arabia was by (Altaf A. et al., 2019); this study shows that about one-third of the physicians are unsatisfied with overall working conditions. (Alyaemni A, 2019), conducted a study in Riyadh to understand the reasons for burnout among physicians. The study's findings show that a heavy workload could be one of the main reasons for burnout. According to a study conducted by (Alsaawi et al., 2019), there is a high risk of burnout among emergency physicians in Saudi Arabia. This risk can be avoided by having a proper work-life balance and better working conditions. (Sayaf AB, 2015), conducted a study in the southern region of Saudi Arabia. The study's outcome shows that dissatisfaction is high for many reasons. Moreover, the doctor's turnover rate is very high in the region for these reasons.

A similar study was conducted in Lahore, Pakistan, by (Atif K et al., 2015), and the outcome of this study is also pretty similar. According to this study, a large number of Doctors were found to be dissatisfied with their jobs. This is affecting performance and efficiency. The reasons for this dissatisfaction were many. In another study conducted by (Domagala A. et al., 2018) in Europe, the results showed that physician satisfaction can be linked to workload, Incentives (non-financial), and relationships with colleagues. (Roditis, K et al., 2019), conducted a survey-based study in Greece to understand the satisfaction of junior doctors. The main reason for dissatisfaction was professional burnout while working in Greek public hospitals. A state of mental Depression, exhaustion, and decreased personal accomplishment characterizes physician-professional burnout. H Gothe et al., 2007, conducted their study in Germany. According to their study, practicing as a doctor is a big challenge; doctors have to manage many stress factors like work stress and burnout. These problems affect the doctors and the organizations in which they work. Matsumoto M (et al., 2004) conducted a similar study in Japanese ruler areas. The findings of this study show that most of the doctors were satisfied with their work, but there were some factors about which doctors could have been happier, like duration of holidays and workload.

Nylenna M et al., 2005, conducted a study on doctors' satisfaction in Norway. In this, the satisfaction of doctors was compared with different professionals. The study has found that most Norwegian

doctors are more satisfied than other professionals. A similar study was conducted on Nigerian doctors by (Ofili AN. et al., 2004). In this study, the satisfaction of Nigerian doctors was measured and compared with the satisfaction of North American and European doctors. The study showed that the satisfaction of Nigerian students was far less compared to that of North American and European doctors. (Kour S et al., 2009) conducted a study in the Delhi area, the results showed a large percentage of doctors were found to be dissatisfied. The main reason for this dissatisfaction was long working hours and low salary. Another essential factor that added to dissatisfaction was the number of night shifts per month a doctor has, (Joyce C and Wang WC, 2015) conducted a doctor satisfaction study in Australia. The study shows low job satisfaction was linked to poor professional development opportunities and long working hours. (Albelall KS et al., 2019), His study has found a very different reason for doctors' dissatisfaction: the inefficient use of time significantly affects their appointments. It affects the cost and, in turn, drains resources by disrupting clinic flow. This leads to burnout and stress.

(Rosta J et al., 2009) Compared to job satisfaction among doctors in Germany and Norway. The study's outcome shows that doctors from Norway hospitals have higher satisfaction than German doctors. The main reason for higher satisfaction is better salary, control, and working hours. (Cozen JF, 2015), in his study has tried to understand the relationship between doctor's satisfaction and effect on quality. The study shows a direct relationship between the satisfaction levels of doctors and quality outcomes

Methodology

This study is based on a primary survey of practicing doctors in the Al Kharj region of Saudi Arabia. The first portion of the questionnaire asks the respondents' demographic profile, age, nationality, gender, place of work, and specialization. It is followed by three statements asking about their overall satisfaction, desire to continue with their current job, and recommending the place of work to others. Finally, the last section of the questionnaire consists of fifteen statements on different dimensions related to work. These statements are based on studies reviewed earlier. And the respondents are supposed to indicate their preference on a scale of 1 to 5, where 1 strongly disagrees, and 5 strongly agrees.

The fifteen statements are subjected to factor analysis to extract factors that can facilitate in identifying the dimensions that are instrumental towards doctors' satisfaction with their work. The first two statistics are related to the sample of the respondents. The first statistic to consider is the Kaiser-Meyer-Olkin Measure of Sampling Adequacy. The value of this statistic should be at least 0.60 to indicate that the sample size is adequate for the analysis. The second statistic is Bartlett's test of sphericity. This value should be significant. That is, its p-value should be less than 0.05.

Next, the commonalities are extracted using the method of Principle Component Analysis. It indicates the proportion of variance in the variable/statement that is explained by the extracted factor. Usually, a commonality score of 0.4 and above is accepted. Following this, the number of extracted factors is identified, and the extracted factors explain the total variance. Usually, the total variance explained should be more than 70%. Finally, the factors are rotated using Varimax with Kaiser Normalization so that each variable is associated with the factor with the highest factor loadings. Usually, factor loading of more than 0.4 is related to the specific factor.

Lastly, the scores of variables associated with each factor are summed and used as independent variables to perform regression on satisfaction scores. The satisfaction scores are taken from

the three statements which measure the respondents' satisfaction. Their corresponding p-values of the t-statistics assess the significance of each factor. If this p-value is less than 0.05, the variable is considered significant. The fitness of the overall model is assessed through the p-value of the F-statistic, which also should be less than 0.05 for the model to be fit.

Analysis

A questionnaire designed based on previous studies was used for surveying. 69 doctors working in Prince Sattam University Hospital, Al Kharj; Khalidiyah City Hospital, Al Kharj; and private polyclinics in Al Kharj city were contacted. 17 questionnaires were not considered due to incomplete responses. A brief description of the sample under study is provided in Table 1

Table 1: Descriptive Statistics.

Category	Frequency	Percentage
Age		
less than 30	16	30.77
30-40	19	36.54
41-50	11	21.15
51 and above	6	11.54
Nationality		
Saudi	9	17.31
Arabic	29	55.77
Asian	8	15.38
Others	6	11.54
Gender		
Male	35	67.31
Female	17	32.69
	52	100.00
Place of work		
University hospital	22	42.31
King Khalid hospital	20	38.46
Private hospital	10	19.23
Specialization		
General Practioner	5	9.62
Pedia	8	15.38
Specialized/ Specialist	17	32.69
Gynae	12	23.08
Surgeon	3	5.77
Others	7	13.46

The section after the descriptive statistics deals with the satisfaction level of the doctors. Four statements relate to satisfaction, namely/viz. The respondents' expectations, overall satisfaction, continuing job, and recommendations are asked on a Likert scale. A pictorial representation of the responses is provided in Figure 1. Here, SDA-is strongly disagree, DA disagrees, N is neutral, A agrees, and SA is strongly agree.



Next, factor analysis is performed on 24 statements related to dimensions of satisfaction. The statements and their average score is given in Table 2. The respondents have given scores on a scale of 1 to 5, where 1 strongly disagrees and 5 strongly agrees. As is evident in 9 statements, only the score is more than 4, indicating agreement. In 3 of the statements, the score is less than 3, indicating disagreement. A look at the mode of the scores gives a better representation of the data. 7 out of 24, that is, the respondents strongly agreed with 29.16 percent of the statements. 8 out of 24, that is, for 33.33 percent of the statements, the respondents agreed. The respondents were neutral in 5 out of 24, for 20.83 percent of the statements. Moreover, for 16.66 percent of the statement, the respondents disagreed. The corresponding standard deviation for the response of each statement is also given in Table 1

Statement	Mean	Mode	Standard Deviation
The administrative procedures at my workplace are almost perfect	3.96	4	0.77
There should be a single patient management system where in a person's medical file can be accessed at any hospital	4.19	5	1.12
It's difficult to explain things to patient in non-technical language.	2.71	2	1.05
It's difficult to diagnose a disease without proper tests.	4.42	5	0.87
It is not possible to be always polite with all patients.	3.19	3	1.12
I always maintain a distance with my patient(s).	3.23	3	0.92
It is always better to respect the working hours	4.42	5	0.78
Work pressure affects my behavior	3.65	3	1.05
Patients and their attendants are too demanding.	3.06	2	1.07
Personality of a doctor does make a difference in the minds of patient(s).	4.37	5	0.86
Patient never gives importance to a doctor's qualification/specialization/experience.	2.81	2	1.03
It is not possible to devote ample time to each patient(s).	3.62	3	1.19
We are in a noble profession, no questioning or scrutiny should be done of our work.	2.63	2	1.21
We as doctors are respected as our counterparts in other places	4.04	4	1.01
Accountability affects my decision	3.33	4	1.04
My opinion is respected by my colleagues and management	3.92	4	0.81
Patient(s) are impressed the building and décor of hospital / dispensary.	4.08	4	0.79
The support staff is important for me	4.40	5	0.89
Availability of all facilities/specializations is important for a hospital	4.27	5	1.03
Communications between different departments and also hospitals is important	4.52	5	0.90
My salary is as per the standards	3.17	4	1.00
My personal life is not affected	3.33	4	0.86
There are ample career progression opportunities	2.98	4	1.08
Job security is high	2.67	3	1.04

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy had a score of 0.60, which indicates that the sample size is adequate for the study. Bartlett's Test of Sphericity is significant as it has a p-value of less than 0.05, as it rejects the null hypothesis of the correlation matrix between variables to be an identity matrix. This indicates a correlation between the variables, which is required to perform factor analysis (Table 1). All the commonalities are over 0.4 (Table 2). This indicates that more than the required 40% of the variance in the individual items is accounted for in the analysis. All the variables with an Eigenvalue of more than 1 are selected for extraction of factors. In the analysis, there are 5 factors with an Eigenvalue of more than 1 (Table 3). The Rotation Sums of Squared Loadings of the Eigenvalues indicate that the five factors account for 21.59, 15.27, 14.45, 10.83, and 10.79 percent, respectively. The cumulative is 72.93 percent, which indicates that the five extracted factors account for 72.93 percent of the variance in all the variables (Table 3).

Next, the factors are rotated to extract the factor with the higher absolute value of the loading. Factor 1 is loaded with variables 18, 19, and 2. Factor 2 is loaded with variables 21, 24, and 23. Factor 3 is loaded with variables 4, 14, and 16. Factor 4 is loaded with variables 7 and 1. And factor 5 is loaded with variables 8, 12, and 9 (table 4). Based on the dimensions of the statements, the factors are named Administration, Work Pressure, Respect, Systems, and Personal.

Finally, the score of the extracted factors is regressed on the average satisfaction scores using regression. The R-square is significant as the p-value of the F-ratio is 0.000 (Table 5). Among the five factors under study, factors 1 and 2 are insignificant as their respective p-values for the t-stat are more than 0.05. The remaining two factors are significantly associated with doctors' satisfaction as the p-values are less than 0.0, indicating significance at a 5% level. The fifth factor is significant but at 10% significance level, as the associated p-value is 0.055 (Table 5). Based on the value of the coefficients, the results indicate that variables 3 and 4 are positively associated with satisfaction, while variable 5 is negatively associated with satisfaction.

The first factor of the study was 'Administration'. Under this dimension, respondents were asked to respond to 2 statements. The first statement to which respondents were asked to respond was 'The Administrative procedures at my workplace are almost perfect'.

In response to this statement, respondents' responses were statistically significant. The following statement was, 'It is always better to respect the working hours. This implies that satisfaction with the administrative procedures and respect for the specified working hours significantly affect Doctors' satisfaction.

The second factor of the study was 'Work Pressure'. Three statements were asked under this dimension. The first statement under this dimension was, 'Work pressure affects my behavior.' The second statement in this dimension was 'Patients and their attendants are too demanding'. The last statement under this dimension was, 'It is impossible to devote ample time to each patient (s). This implies that the amount of work pressure, the nature of the demand of the customers, and the time devoted to service to a customer significantly impact Doctors' satisfaction.

The third factor of this study was 'Respect.' Under this dimension, there are three statements. The first statement in this dimension is, 'We, as doctors, 'are respected as our counterparts in other places. The second statement under this dimension is 'My colleagues and management respect the opinion. The last statement is that the 'Active support staff is important'. This factor is also significant. It implies that the respect and support of others is an important factor

contributing to doctors' satisfaction. The last statement was, 'There should be a single patient management system where a person's medical file can be accessed at any hospital.' Doctors feel their satisfaction would increase with a good Patient Management System.

A fourth of the study is 'Systems'; respondents were asked to respond to 3 statements in this dimension. The first statement in this dimension is 'there should be a centralized patient management system.' The second statement states, 'Availability of all facilities/ Specialization is important for a hospital'. The last statement in this dimension is, 'It is difficult to diagnose without proper tests. These factors are related to the systems prevalent in their respective hospitals. This factor is not significant. Nevertheless, this does not mean that they are not necessary. For the doctors studied in this study, these factors are insignificant in explaining their satisfaction/dissatisfaction.

The last fifth of the study is 'Personal'. The first statement in this dimension is, 'My salary is as per the standards'. The second statement under this dimension is 'There are ample career progression opportunities'. Here again, most of the respondents do not agree with this statement. The last statement of the study is that Job security is high. The last factor related to personal reasons is again insignificant. This, again, means that they are optional. This implies that in the sample of doctors studied in this study, these factors are not significant in explaining the differences between those who are satisfied and those who are not satisfied.

Conclusion

This implies that satisfaction with the administrative procedures and respect for the specified working hours plays a significant role in Doctors' satisfaction, Work Pressure, Patients and their attendants are too demanding, respect from peers, and support from staff. As these items are significant in explaining the differences between those who are satisfied and those who are not satisfied, the study recommends improving upon these items to increase the satisfaction level of doctors.

However, this study is not free from limitations.

A significant limitation of this study is the number of respondents. The scope of future work would be to apply this questionnaire to a larger sample of doctors. An important aspect is that this study was done during the Covid-19 pandemic. Although the researchers deliberately avoided referring to a pandemic, repeating this survey during the pandemic and comparing the results of the two studies would open up a new perspective on the impact of a pandemic on doctors

Acknowledgement

"This study is supported via funding from Prince Sattam bin Abdulaziz University project number (PSAU/2024/R/1445)"

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Appendix Table 1

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.602
Bartlett's Test of Sphericity	Approx. Chi-Square 400.15
	df 91
	Sig. 0

Only the communality value which should be more than 0.5 to be considered for further analysis

A look at the communalities associated with

Communalities		
	Initial	Extraction
VAR00001	1	0.861
VAR00002	1	0.702
VAR00004	1	0.747
VAR00007	1	0.885
VAR00008	1	0.727
VAR00009	1	0.475
VAR00012	1	0.574
VAR00014	1	0.729
VAR00016	1	0.726
VAR00018	1	0.782
VAR00019	1	0.785
VAR00021	1	0.728
VAR00023	1	0.74
VAR00024	1	0.75

Extraction Method: Principal Component Analysis.

total Variance Explained									
Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.02	28.73	28.73	4.02	28.73	28.73	3.02	21.59	21.59
2	2.15	15.35	44.08	2.15	15.35	44.08	2.14	15.27	36.86
3	1.71	12.25	56.33	1.71	12.25	56.33	2.02	14.45	51.31
4	1.24	8.88	65.21	1.24	8.88	65.21	1.52	10.83	62.14
5	1.08	7.72	72.93	1.08	7.72	72.93	1.51	10.79	72.93
6	0.98	6.97	79.90						
7	0.62	4.40	84.30						
8	0.50	3.54	87.84						
9	0.44	3.15	91.00						
10	0.42	3.00	94.00						
11	0.33	2.34	96.34						
12	0.22	1.60	97.94						
13	0.16	1.15	99.09						
14	0.13	0.91	100.00						

Extraction Method: Principal Component Analysis.

Rotated Component Matrixa					
	Component				
	1	2	3	4	5
VAR00018	0.86	0.032	0.169	-0.036	0.106
VAR00019	0.842	0.073	0.092	0.164	0.184
VAR00002	0.769	0.002	0.032	0.274	0.185
VAR00021	0.235	0.786	-0.221	0.036	0.074
VAR00024	0.122	0.775	0.167	-0.309	-0.103
VAR00023	-0.221	0.746	0.247	0.267	-0.056
VAR00004	0.002	-0.05	0.817	-0.004	0.278
VAR00014	0.533	0.101	0.647	0.12	0.02
VAR00016	0.551	0.118	0.618	-0.048	-0.159
VAR00007	0.247	-0.041	-0.035	0.895	0.14
VAR00001	0.108	0.039	0.593	0.648	-0.274
VAR00008	0.198	0.032	0.132	0.062	0.816
VAR00012	0.403	-0.318	0.049	0.022	0.555
VAR00009	-0.023	0.475	-0.078	-0.039	0.491

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.548985	0.301385	0.246805	2.103304

a. Predictors: (Constant), VAR00005, VAR00004, VAR00002, VAR00003, VAR00001.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	122.143	5	24.429	5.522	.000a
	Residual	283.129	64	4.424		
	Total	405.271	69			

a. Predictors: (Constant), VAR00005, VAR00004, VAR00002, VAR00003, VAR00001.

b. Dependent Variable: VAR00008.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.292	1.929		4.298	0
	VAR00001	0.441	0.127	0.432	3.469	0.001
	VAR00002	0.323	0.147	0.253	2.187	0.032
	VAR00003	-0.25	0.128	-0.226	-1.957	0.055
	VAR00004	-0.143	0.132	-0.142	-1.085	0.282
	VAR00005	0.027	0.104	0.027	0.258	0.797

a. Dependent Variable: VAR00008.