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Machiavellianism and Aspirations as Predictors of Quality of Life and Subjective Happiness among Interning Doctors and Practicing Doctors

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ABSTRACT

The present quantitative study adopts a between group design to assess the difference between interning doctors and practicing doctors in the levels of Machiavellianism, aspirations, quality of life and subjective happiness. A correlational design was also employed to determine if quality of life and subjective happiness can be predicted by Machiavellianism and its dimensions of amorality, desire for status, desire for control and distrust of others; and aspirations and its dimensions of wealth, fame, image, personal growth, relationships, community, and health. Purposive Sampling and Snowball Sampling techniques were used to collect data from 100 interning and 100 practicing doctors. Independent t-test results showed that practicing doctors were significantly higher on Machiavellianism and its dimensions of amorality, desire for status and distrust of others; aspirations, its dimension of image, community, health, and physical quality of life. Interning doctors were higher on desire for control, fame aspirations, psychological health and overall quality of life. Stepwise multiple regression analysis showed that personal growth and health aspirations predicted quality of life in interning doctors and Machiavellianism, amorality; wealth, fame, image, community and health aspirations predicted quality of life among practicing doctors. Health aspiration was a predictor of subjective happiness in interning doctors. In practicing doctors, amorality, desire for status, distrust of others; wealth, fame, image, personal growth, relationships, community and health aspirations were predictors of subjective happiness. In present day India the rapidly changing and overburdened healthcare system has affected the well being of health care professionals and the present study throws light on to some factors that may influence quality of life and happiness of doctors in India.

Keywords: *Machiavellianism, Aspirations, Quality of Life, Subjective Happiness, Interning Doctors, Practicing Doctors.*

Introduction

Machiavellianism is characterized by cynical, pragmatic, misanthropic, and immoral beliefs, emotional detachedness, agentic and self-beneficial motives, strategic long-term planning, manipulation and exploitation, and deception (1,2). A Machiavellian individual is one who manipulates others for his own purpose. He can go to any extent to achieve what he wants. It need not be ethically right, but the Machiavellian individual doesn't have that in mind. Dawkins and Krebs (3) stated that "natural selection favors individuals who successfully manipulate the behavior of other individuals, whether or not this is to the advantage of the manipulated individuals".

Bratek, Bonk, Bulska, Tyrała, Seweryn, and Krysta (4) found that among the various participants (n=509) i.e., medical school candidates, medical students, medical trainees, residents and specialists, the highest Machiavellianism score was found in the group of medical school candidates, and the lowest was reported in the group of registered specialists.

Sendjaya, Pekerti, Härtel, Hirst, and Butarbutar (5) studied authentic leadership, Machiavellianism, moral action and moral reasoning in 70 managers and found that Machiavellianism offsets the positive relationship between moral reasoning and authentic leadership. Specifically, when Machiavellianism is high, both the positive relationship between moral reasoning and authentic leadership, and the positive relationship between authentic leadership and moral actions, are reversed.

Merrill, Laux, Thornby, and Vallbona, (6) studied 167 freshmen and 823 senior medical students, finding that 15% of all students scored positively on the Machiavellianism scale. Men had higher Machiavellianism scores than women. Those students with high Machiavellianism scores relied excessively on high-tech medicine and were externally controlled, intolerant of ambiguity, and authoritarian.

Machiavellianism can be seen as a strategy in the context of the Game Theory Models – wherein when one thinks of the game it is usually for the win. The individual is playing to win or to come first (7). An individual can take a Machiavellian approach to the goals that they aspire for. Aspirations can be defined as the goals that individuals have in their life (8). Self – Determination Theory of aspirations states that, aspirations can be broadly divided into two kinds, - extrinsic aspirations and intrinsic aspirations (9). Extrinsic Aspirations are those aspirations of an individual that deal with anything external or outward such as wealth, fame, and image. Intrinsic Aspirations are those aspirations of an individual which deal with the innate aspirations such as meaningful relationships, personal growth and community contributions.

In a study done by Seetharaman, and Logaraj (10), with 147 interns as their sample and career aspirations and apprehension as the variables of the study, it was found that, personal interest and passion for the profession (45.3%), financial stability (43.5%) and parents' wish (35.8%) were the primary factors quoted by the interns for choosing medicine as a career. Majority of the interns (73.7%) wish to join one or other post-graduation course while only around 10% were inclined towards general practice and/or working in a primary care setting under government service.

Veitch, Underhill, and Hays (11) studied career aspirations of 50 medical students. As it was a longitudinal study it was found Career aspirations changed appreciably between 2001 and 2005: the number of undecided students had halved, the numbers interested in general had reduced by one-third, the numbers considering surgery had reduced to one-third, and none was considering pediatrics at exit. Conversely, the number considering emergency medicine had almost doubled and more than doubled for obstetrics and gynecology.

Quality of Life can be described and measured in individual terms, depending on an individual's lifestyle, past experiences, hopes for the future, dreams and also ambitions. Quality of life must also include all the areas of life and experiences that an individual has. WHO defines quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of their environment.

Kim, Han, Kwak, and Kim (12) conducted a study focusing on quality of life, clinical competence in 335 nurses. This study demonstrated that it is possible to directly examine the relationship between professional quality of life and clinical competence among nurses. The authors concluded that interventions to increase nurses' compassion satisfaction and relieve compassion fatigue are needed, as professional quality of life may affect clinical competence.

Susmita, Edwin, and Braganza (13) carried out a study in which 93 medical students were assessed on their quality of life. There was a decline in the quality of life and in all four of its domains during the course of internship. A significant decline was present among women, specifically those who reported poor sleep and individuals who had an obligation of compulsory rural service after internship.

Taylor-East, Grech, and Gatt (14) examined mental health of 117 Junior doctors and found that 49.4% had significant psychological distress. Further analysis revealed that lack of leisure time, uncertainty, migration and being female were significantly related to psychological distress.

Quality of life is a valued societal outcome for policy makers and academics from various fields such as economics, sociology, and psychology. Of late, there has been increasing interest in individual subjective wellbeing (SWB), or the similar construct of "happiness". There is evidence for the usefulness of subjective wellbeing as a social indicator of quality of life. There are positive outcomes associated with

subjective wellbeing (e.g., health, successful relationship, productivity, etc.), providing evidence for its extrinsic value as a predictor of key outcomes.

Zhang, and Wu, (15) found that nursing students' subjective well-being was not very high. Even among medical interns similar results were found. Grant, Guille, and Sen (16) examined well-being and depressive symptoms in around 1621 individuals beginning medical internship. The key findings of the study were that low subjective well-being significantly predicted increased depression symptom scores during the stress of medical internship and accounted for individual level inter-variability in depression symptom trends across time.

Qin (17) reviewed subjective well-being and personality factors affecting it in clinical college students. The students had a high level of subjective well-being. Extroversion was positively related to subjective well-being, and neuroticism, self-esteem and depression were negatively related to subjective well-being. Neuroticism was the most powerful and stable factor predicting subjective well-being; the depressed attitude, physical symptoms and depressed actions were also powerful factors predicting subjective well-being, among which, feeling of exhaustion and sad mood were comparatively effective; while the self-esteem only explain a small part of subjective well-being.

Li and Chen, (18) found that social support has a significant positive influence on subjective well being through a study on 553 medical students. Self acceptance and self evaluation are also related to subjective well being of college students (19). According to 778 Medical students satisfaction with life is an important contributor to the quality of life and subjective wellbeing (20).

The research presented indicates that medical students have poor quality of life and wellbeing and a multitude of factors affect these in them. However, there appears to be a dearth of research looking into the quality of life and happiness of practicing doctors. Further, aspirations have often been studied in college students, but it is also true that aspirations change over lifetime based on one's experiences. Thus, the aspirations of older doctors have also not been explored. Keeping this in mind the present study intends to compare interning doctors and practicing doctors on their personality, viz., Machiavellianism; aspirations, quality of life and subjective happiness. The present study also aims to determine the predictors of quality of life and subjective happiness in interning and practicing doctors, viz., Machiavellianism and aspirations.

Method

Plan and Design

The present study is a quantitative study which adopts a between groups design. The two groups, which include interning doctors and practicing doctors, were compared on four variables i.e., Machiavellianism and its dimensions, Aspirations and its dimensions, Quality of Life and its dimensions, and Subjective Happiness. This study has also adopted a correlational design to examine whether Machiavellianism and its dimensions, Aspirations and its dimensions predict Quality of Life and Subjective Happiness in interning doctors and practicing doctors.

Sample and procedure

The present study had a sample of 200 participants of which 100 were interning doctors and 100 were practicing doctors who were selected through purposive sampling. The inclusion criteria for interning doctors were that they had completed their MBBS degree and were in the midst of internship in a hospital at the end of the course. They were also between the age group of 20- 30 years. The exclusion criteria were that they were pursuing MBBS through a distance mode education or if they were pursuing dentistry. For the sample of practicing doctors the inclusion criteria was that they should have been in the

age range of 30 – 40 years, they had completed their MBBS and internship and should have been practicing as a doctor for a period of at least three years. Again, dentists were not included in the study.

Instruments

Information Schedule

Basic demographic details about the participants were collected from a personal information schedule which included questions about age, religion, education completed, employment status, relationship status, living arrangements, physical and mental health status of the participants.

Machiavellianism

The Machiavellianism Scale was developed by Dahling, Whitaker, and Levy (21). It is a 16 item scale having 4 dimensions namely – Amorality, Desirability of Status, Desirability of Control, and Distrust of Others. Amorality can be defined as a willingness to disregard standards of morality and see value in behaviors that benefit the self at the expense of others. Desirability of Status can be defined as a desire to accumulate external indicators of success. Desirability of Control can be defined as a need to exercise dominance over interpersonal situations to minimize the extent to which others have power. Distrust of Others can be defined as a cynical outlook on the motivations and intentions of others with a concern for the negative implications that those intentions have for the self. It is a very reliable scale as its reliability (internal consistency) for the entire is 0.82. Scoring is done on a 7 – Point Likert Scale where 1 is Strongly Disagree and 7 is Strongly Agree. The higher the individual's Cumulative Score, the higher are the Machiavellianism tendencies in the participant.

Aspirations

The Aspirations Index is used to measure the levels of aspirations. It was developed by Kasser and Ryan (8). Aspirations refer to people's life goals. This scale has 35 items and 7 dimensions. Wealth which can be defined as the abundance of valuable resources or valuable material possessions, Fame which can be defined as the state of being known by many people, Image which can be defined as the general impression that a person, organization, or product presents to the public, Personal Growth which can be defined as the development as an individual, Relationships which can be defined as the way in which two or more people or groups regard and behave towards each other, Community which can be defined as the condition of sharing or having certain attitudes and interests in common, and Health which can be defined as an individual's physical and mental state. The internal consistency reliability of this scale is 0.76 with no negative scoring. The scoring for this scale is done on a 7 – Point Likert Scale where 1 signifies that the goal is not at all important and 7 signifies that the goal is extremely important. Higher scores in a dimension indicate higher aspirations of the participant in that specific dimension.

Quality of Life

To measure the Quality of Life, the WHO – Quality of Life Bref [WHOQOL – BREF] was chosen which was developed in 1996 (22). This scale developed by the WHO has 26 items and 4 dimensions. Physical Health which can be defined as Physical health can be defined as an essential part of overall health of an individual, which includes everything from physical fitness to overall wellbeing, Psychological Health which can be defined as a level of psychological well-being, or an absence of a mental disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment", Social Relationships which can be defined as an interaction between 2 or more individuals, and the Environment which can be defined as the sum total of the surroundings of an individual. This scale's internal consistency reliability is between 0.66 and 0.80. There are three reversed score items and the scoring is done on a 5 – Point Likert Scale where for each set of questions the scoring changes.

Subjective Happiness

The Subjective Happiness Scale was developed by Lyubomirsky and Lepper (23).It is a very short scale with only 4 items but it has a very high Cronbach's "α" reliability score of 0.79 to 0.94. There are no dimensions but the 4th item is reverse scored. The scoring is done on a 7 – Point Likert Scale, which is different for the questions. Higher scores indicate higher levels of subjective happiness.

Procedure

The Sample Groups were chosen and participants were selected through Purposive Sampling. Permission from hospitals were sought and obtained. Participants were contacted and those filling the criteria were informed about the study. Informed Consent was taken and Machiavellianism Personality Scale, Aspirations Index, WHOQOL – BREF, and Subjective Happiness Scale were administered. After the data was collected, it was analysed using SPSS -independent sample t-test to see if there was any difference in the results of the interning doctors and practicing doctors and regression analysis to understand how the typical value of the dependent variable (or 'Criterion Variable') changes when any one of the independent variables (or 'Predictor Variable") is varied, while the other independent variables are held fixed.

Results

The obtained quantitative data of this study were analyzed using independent t-test and stepwise multiple regression analyses using the statistical package for social sciences (SPSS) version 20.0. In the first section of the results, t-test was used to analyze the data and determine if there are significant differences between interning doctors and practicing doctors, with respect to Machiavellianism, aspirations, quality of life and subjective happiness and their respective dimensions presented in table 1. In the second section, regression analysis was used to see if the variables -Machiavellianism and aspirations could predict the criterion variables - quality of life and subjective happiness among interning doctors and practicing doctors respectively.

Analysis of the data shows that there was a significant difference between interning doctors and practicing doctors. Practicing doctors were higher on amorality, desire for status, distrust of others and overall Machiavellianism than interning doctors. Interning doctors had a greater desire for control than practicing doctors. There were significant differences between the two groups in their intrinsic and extrinsic aspirations as well. Interning doctors aspired more for fame while practicing doctors aspired more for image, health and working for the community. However, interning and practicing doctors had similar aspirations for wealth, personal growth and relationships. There were differences found in the quality of life of the two groups with practicing doctors reporting better physical health and interning doctors reporting better psychological health and overall quality of life. Interning and practicing doctors had reported similar levels in the two dimensions of quality of life – environment and social relationships. They also reported similar levels of happiness in their lives.

Regression analysis was done to see if quality of life and its dimensions of physical health, psychological health, social relationships, environment and subjective happiness could be predicted by Machiavellianism and its dimensions of amorality, desire for status, desire for control, and distrust of others and aspirations and its dimensions of wealth, fame, image, personal growth, relationships, community, and health in interning doctors and practicing doctors.

It can be seen from table 2 that the overall quality of life of interning doctors was predicted by their health personal growth aspirations with increase in these aspirations improving their quality of life. Health and wealth aspirations also seem to contribute positively to physical health of interning doctors but the negative association between fame aspirations and physical health suggests that its influence on this aspect of quality of life is detrimental. Higher aspirations for image, personal growth and working for the

community can have some beneficial effects on the psychological health of interning doctors, but fame and health aspirations have a negative association with the same. Personal growth and health aspirations also seem to affect the environment dimension of quality of life positively. Further greater health aspirations seem to increase the happiness in interning doctors.

Table 3 shows the various predictors of quality of life and subjective happiness among practicing doctors. It can be seen that overall quality of life can be predicted by health, community, image, wealth, fame aspirations as well Machiavellianism and its dimension of amorality. Physical health of practicing doctors could be predicted by Machiavellianism and its dimensions of amorality, desire for control, desire for status as well wealth, image, community and health aspirations. Further it was seen that the significant predictors of psychological health were again Machiavellianism and its dimensions of desire for control, desire for status and fame, personal growth, and health aspirations. The contribution of dimensions of Machiavellianism amorality, desire for control, desire for status, distrust of others and wealth, image, and personal growth aspirations in social relationships was significant with some of these having an adverse affect and some promoting it in practicing doctors. Dimension of Machiavellianism Desire for control continued to be a significant predictor of environment, the last dimension of quality of life. This dimension was also associated with Fame, Image, Personal Growth, and Health aspirations of practicing doctors. A number of factors seem to play a role in the subjective happiness of practicing doctors. While some dimensions of Machiavellianism such as amorality, desire for status and distrust of others did have some influence on happiness; all the aspirations such as wealth, fame, image, personal growth, relationships, community and health affected the levels of subjective happiness in practicing doctors.

Discussion

There was a significant difference in the levels of Machiavellianism between the groups of interning and practicing doctors with practicing doctors having a higher mean than the interning doctors. Assadi, Nakhaei, Najafi, and Fazel, (24) carried out a study on Iranian medical students and doctors and found no difference in Machiavellianism between the two groups. The difference in the results between the two studies could be attributed to cultural differences in these countries which can influence an individual's personality and behavior.

Practicing doctors when compared interning doctors were higher on amorality, desire for status, distrust of others whereas interning doctors had a greater desire for control. Interning doctors, being trainees under the supervision of others during their internship could want increased control. Mudrack (25) found that there is a decrease in Machiavellianism with age which is not the case in the present study. Practicing doctors over a period of time could have developed increased desire for status and their experiences may have led to an increased distrust of others. Shafer and Simmons (26) showed that individuals who have been in a position for a longer period show higher levels of ethics.

Easterlin (27) talks about how aspirations grow with individual and change with his changing circumstances. Interning and practicing doctors had similar aspirations for wealth, personal growth and relationships. This is understandable as these aspirations may not have been completely fulfilled in the comparatively older practicing doctors. Higher aspirations for fame in interning doctors and image, health and working for the community practicing doctors are in line with expectations of age related aspirations with younger people desiring to be more famous and older people desiring for better health, image and community work.

Su, Weng, Tsang, and Wu (28) found quality of life of hospital staff to be poor. Kjeldstadli, Tyssen, Finset, Hem, Gude, Gronvold, et al., (29) found that life satisfaction decreased during medical school. Medical students were as satisfied as other students in the first year of study, but reported less satisfaction in their graduation year. In another study the job satisfaction among the same doctors showed

a significant increase from 1994 to 2002 (30). These studies present the context for understanding the mixed results of quality of life and happiness in interning and practicing doctors.

Quality of life for interning doctors could be predicted by aspirations dimension of health and personal growth, whereas for practicing doctors quality of life could be predicted by aspirations, and its dimensions of health, community, image, wealth, fame, Machiavellianism and its dimension of amorality.

While some dimensions of Machiavellianism such as amorality, desire for status and distrust of others did have some influence on happiness; all the aspirations such as wealth, fame, image, personal growth, relationships, community and health affected the levels of subjective happiness in practicing doctors. Further greater health aspirations seem to increase the happiness in interning doctors. Stutzer (31) found that wealth aspiration and happiness were related to each other and the greater the gap between the actual income and the wealth aspiration, the lesser the happiness of the individual. Bauer and Mc Adams (32) compared students and adults on personal growth and well being where they found that personal growth is correlated to subjective well being. Demir (33) showed that personal relationships were predictive of happiness. Gerdtham and Johannesson (34) found that health has a positive correlation with happiness. All these disparate studies show how the different aspirations could influence the happiness of doctors.

The findings of the present were exploratory in nature as not many studies have been carried along similar lines in the Indian scenario. The current study also had some limitations which decrease the generalizability of the findings. Firstly, gender differences would have added more depth to the findings. The specialization, income and workload of the doctors could have been considered as well which would have given more insights. However, despite this the study has some important implications. Firstly, the differences in predictors of quality of life and happiness in interning and practicing doctors indicate that any intervention to improve the life of doctors should be customized for the stage of the career in which they are in. the poor psychological health of practicing doctors highlights the need for this as health and well being of doctors affects their work performance, thus, affecting the patients themselves.

Doctors in India are an overburdened group with very little being done to improve their quality of life in terms of well being, satisfaction and happiness. More studies have to be carried out to understand what other factors such as nature of work, doctor – patient relationship, hospital environment, work –life balance, etc. that affects them so that positive intervention can be undertaken in this regard.

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Table 1 -*Results for independent sample t test for Machiavellianism and its dimensions, dimensions of aspirations, quality of life and its dimensions and subjective happiness among Interning Doctors and Practicing Doctors.*

Variable	*Interning Doctors (N=100)*		*Practicing Doctors (N=100)*		*t*
	Mean	*S.D*	*Mean*	*S.D*	
Machiavellianism	55.08	15.91	65.67	10.85	5.500**
Machiavellianism – Amorality	13.85	6.37	18.49	5.83	5.374**
Machiavellianism – Desire For Control	8.12	2.71	7.32	2.62	-2.126*
Machiavellianism – Desire For Status	13.17	4.40	15.15	3.47	3.534**
Machiavellianism – Distrust of Others	19.94	5.13	24.71	5.31	6.458**
Aspirations	177.38	24.88	195.34	19.09	5.727**
Aspirations – Wealth	24.75	6.25	26.26	5.28	1.847
Aspirations – Fame	33.69	6.41	25.78	5.84	-9.122**
Aspirations – Image	19.43	6.74	27.11	4.21	9.664**
Aspirations – Personal Growth	28.07	5.01	28.32	4.14	0.385
Aspirations – Relationships	29.31	5.48	28.28	4.91	-1.399
Aspirations – Community	25.82	6.13	27.80	3.96	2.714**
Aspirations – Health	28.87	5.81	31.79	2.58	4.590**
Quality of Life	89.29	8.07	86.68	9.99	-2.030*
Quality of Life – Physical Health	21.93	3.42	23.94	3.68	3.997**
Quality of Life – Psychological Health	23.20	2.36	18.50	2.53	-13.573**
Quality of Life – Social Relationships	12.00	1.61	11.98	1.79	-0.083
Quality of Life – Environment	32.16	3.03	32.26	3.91	0.208
Subjective Happiness	18.14	2.67	18.91	3.36	1.795

Note - *p<0.01, **p<0.05, SD = Standard Deviation.

Table 2 - summary of the stepwise regression analysis for the predictors of Quality of life and its dimensions of – Physical Health, Psychological Health, Social Relationships, Environment and Subjective Happiness for Interning Doctors.

Variable		Quality of Life	Quality of Life – Physical Health	Quality of Life – Psychological Health	Quality of Life – Social Relationships	Quality of Life - Environment	Subjective Happiness
β	Machiavellianism	N.S	N.S	N.S	N.S	N.S	N.S
	– Amorality	N.S	N.S	N.S	N.S	N.S	N.S
	– Desire for Control	N.S	N.S	N.S	N.S	N.S	N.S
	– Desire for Status	N.S	N.S	N.S	N.S	N.S	N.S
	– Distrust of Others	N.S	N.S	N.S	N.S	N.S	N.S
	Aspirations	N.S	N.S	N.S	0.344***	N.S	N.S
	– Wealth	N.S	0.238**	N.S	N.S	N.S	N.S
	– Fame	N.S	-0.328**	-0.485***	N.S	N.S	N.S
	– Image	N.S	N.S	0.258**	N.S	N.S	N.S
	– Personal Growth	0.247*	N.S	0.405***	N.S	0.219*	N.S
	– Relationships	N.S	N.S	N.S	N.S	N.S	N.S
	– Community	N.S	N.S	0.324***	N.S	N.S	N.S
	– Health	0.460***	0.397***	-0.233*	N.S	0.439***	0.484***
Δ R^2	Machiavellianism	N.S	N.S	N.S	N.S	N.S	N.S
	– Amorality	N.S	N.S	N.S	N.S	N.S	N.S
	– Desire for Control	N.S	N.S	N.S	N.S	N.S	N.S
	– Desire for Status	N.S	N.S	N.S	N.S	N.S	N.S
	– Distrust of Others	N.S	N.S	N.S	N.S	N.S	N.S
	Aspirations	N.S	N.S	N.S	0.118***	N.S	N.S
	– Wealth	N.S	0.056**	N.S	N.S	N.S	N.S
	– Fame	N.S	0.067**	0.118***	N.S	N.S	N.S
	– Image	N.S	N.S	0.058**	N.S	N.S	N.S
	– Personal Growth	0.046*	N.S	0.164***	N.S	0.036*	N.S
	– Relationships	N.S	N.S	N.S	N.S	N.S	N.S
	– Community	N.S	N.S	0.103***	N.S	N.S	N.S
	– Health	0.211***	0.157***	0.023*	N.S	0.193***	0.234***
Total adjusted R^2		0.257*	0.281**	0.466*	0.118***	0.229*	0.234***

Note –NS – Not significant, *p<0.05, **p<0.01, ***p<0.001, N = 100, β – standardized beta coefficient, ΔR^2 - change in R^2

Table 3 - summary of the stepwise regression analysis for the predictors of Quality of life and its dimensions of – Physical Health, Psychological Health, Social Relationships, Environment and Subjective Happiness for Practicing Doctors.

Variable		Quality of Life	Quality of Life – Physical Health	Quality of Life – Psychological Health	Quality of Life – Social Relationships	Quality of Life - Environment	Subjective Happiness
β	Machiavellianism	0.458***	-0.940***	-0.704***	N.S	N.S	N.S
	– Amorality	-0.532***	-0.563***	N.S	-0.283**	N.S	-0.428***
	– Desire for Control	N.S	0.485***	0.340***	-0.330**	-0.270***	N.S
	– Desire for Status	N.S	0.200***	0.197***	0.493***	N.S	0.436***
	– Distrust of Others	N.S	N.S	N.S	0.619***	N.S	-0.183*
	Aspirations	-0.579***	0.895***	-0.537***	-0.473**	-0.367***	-0.561*
	– Wealth	-0.147*	-0.414***	N.S	0.213**	N.S	-0.580***
	– Fame	0.137*	N.S	0.323***	N.S	0.138*	0.280**
	– Image	-0.299***	0.170*	N.S	-0.365***	-0.170*	0.311***
	– Personal Growth	N.S	N.S	0.137*	-0.531***	0.208**	-0.352***
	– Relationships	N.S	N.S	N.S	N.S	N.S	0.496**
	– Community	-0.301***	-0.424***	N.S	N.S	N.S	0.142**
	– Health	0.615***	0.407***	0.332***	N.S	0.827***	0.436***
Δ R^2	Machiavellianism	0.041***	0.014***	N.S	N.S	N.S	N.S
	– Amorality	0.281***	0.317***	0.495***	0.079**	N.S	0.107***
	– Desire for Control	N.S	0.118***	0.069***	0.038**	0.069***	N.S
	– Desire for Status	N.S	0.023***	0.024***	0.180***	N.S	0.171***
	– Distrust of Others	N.S	N.S	N.S	0.059***	N.S	0.007*
	Aspirations	0.134***	0.074***	0.116***	0.028**	0.054***	0.006*
	– Wealth	0.006*	0.085***	N.S	0.024**	N.S	0.337***
	– Fame	0.006*	N.S	0.061***	N.S	0.011*	0.007**
	– Image	0.022***	0.005*	N.S	0.133***	0.009*	0.049***
	– Personal Growth	N.S	N.S	0.007*	0.218***	0.017**	0.084***
	– Relationships	N.S	N.S	N.S	N.S	N.S	0.011**
	– Community	0.050***	0.105***	N.S	N.S	N.S	0.009**
	– Health	0.379***	0.165***	0.109***	N.S	0.684***	0.142***
Total adjusted R^2		0.916**	0.904	0.880*	0.759**	0.844*	0.926**

Note –NS – Not significant, *p<0.05, **p<0.01, ***p<0.001, N = 100, β – standardized beta coefficient, ΔR^2 - change in R^2