Original Paper

Personality Mapping Wand to Organizational Performance

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Abstract

The personality of an individual is a clue to his/her interpersonal needs. Identifying the employee personality type might help organizations to map their employees' needs. Every individual has different needs, if they are fulfilled, s/he is motivated enough to perform. The purpose of the research is to analyze the impact of personality traits on interpersonal needs and using "Personality Mapping" as the tool to analyze these needs.

The research sample for this study is the future workforce, i.e. students enrolled in a business management course. The research measures include the FIRO-B Scale and Big 5 scales. The study reveals that there is a close relationship between personality and interpersonal needs. The interpersonal needs can predict the personality of the individual. All individual have interpersonal needs but all the needs are not dominant. If the dominant need is identified, the organizations can motivate the individual by satisfying his/her dominant need.

The analysis of both i.e. interpersonal needs and the personality can help the organizations to find the Person- job fit and also help them in understanding the motivational aspects of the individual. The predictability of Interpersonal needs from the personality traits gives a clue to the employer about the Job which will best suit the personality of the prospective employee or in other words, which job would satisfy his/her dominant need. Organizational performance is the function of Job Satisfaction and if the needs are satiated, the satisfaction increases and hence the performance.

Keywords

personality mapping, neuroticism, extraversion, interpersonal needs, agreeableness, conscientiousness

1. Introduction

Human beings are highly social in their behavior. They interact with people in a wide variety of ways, ranging from just being together to more intimate forms of socializing. People seek company to avoid being alone, to confabulate, to ask for as well as to offer help, to accomplish common goals, to share joys and sorrows, to listen and to be listened to, to show or to be shown the way, to show off, compete or fight with one another, etc. These interactions are referred to as interpersonal (between persons) behavior. Due to this interpersonal behavior, interpersonal needs arise- i.e. what does one expects from other or from oneself? (Sharma, 2011)

Human motivation consists of goal-directed behavior initiated by a drive state, leading to the attainment of the appropriate goal and producing subjective satisfaction and relief. (Joseph, Thomas and Roopa, 2005). Many empirical studies have investigated the relations between interpersonal needs and the Big Five personality factors which are explained later in the article. In the current study of personality and interpersonal resources, a total of 912 students pursuing MBA degree, have completed the Big Five Inventory, a personality measure, (Benet-Martinez and John, 1998; John, Donahue, and Kentle, 1991) and the FIRO-B, a measure of interpersonal resources.

Sayles (1964) points out that managerial behavior requires the relationship between people and managers and hence if the manager's personality does not allow him/her to exhibit a high degree of interpersonal activity, they experience dissatisfaction. Thus it seems rational to examine the interpersonal needs and personality of potential managers, i.e., Business Management students.

The current study was conducted to explore the relationship between two established models of individual differences. The personality-within model was represented by the Big Five measure; the personality-between model was represented by the FIRO-B model (Fundamental Interpersonal Relationship Orientation – Behavior). It was hypothesized that the two approaches would have common variance in some areas, but that unique dimensions of behavior would emerge for each measure. The regression equation, which is drawn on the basis of the data analysis, can be used for the employment purpose by the organizations to find the Person- job fit and also help them in understanding the motivational aspects of the individual. The predictability of Interpersonal needs from the personality traits gives a clue to the employer about the Job which will best suit the personality of the prospective employee or in other words, which job would satisfy his/her dominant need. Organizational performance is the function of Job Satisfaction and if the needs are satiated, the satisfaction increases and hence the performance.

1.1 Purpose of the Study

The purpose of the research is to analyze the impact of personality traits on the interpersonal needs and use "Personality Mapping" as the tool to analyze these needs. The research measures include the FIRO-B Scale and Big 5 scales.

1.2 Sample

A total of 912 management students (574 male, 338 female) participated in the study. 547 belonged to the "general" category and 365 to the "reserved" category. The "reserved" category is Scheduled Caste, Scheduled Tribe and Other Backward Classes. They have fixed quota for admission to the educational institutes. The rest are included in the "general" category. The sample distribution as per area of specialization is as follows: finance specialization 456, marketing specialization 356 and human resource specialization 100. This is an exploratory study based on stratified convenient sampling.

1.3 Literature Review

Furnham (2008) investigated the relationship between the six Fundamental Interpersonal Relations Orientation (FIRO)-B scales, the Big Five Personality traits assessed by the NEO PI-R, the Hogan Development Survey and two measures of cognitive ability (Watson Glaser; Graduate and Managerial Assessment). He studied the concurrent and construct validity of the FIRO-B measure in various adult groups attending assessment centres in order to locate the FIRO-B dimensions in established personality factor space. The FIRO-B was consistently correlated with extraversion. The other factors were also strongly correlated with the six FIRO-B scores. The regression analysis of FIRO-B variables with each of the Big Five personality traits shows that all are significant particularly for expressed inclusion and wanted control.

The study titled "Relationships between Interpersonal needs and preference for a functional area of management among MBA students" was conducted by Hill (1972). This study also examined interpersonal needs as measured by the FIRO-B instrument in relation to choice of functional specialty among a sample of first year MBA students. The research indicated that the most influential dimensions are the needs related to affection and inclusion. The need for control is not related to preference for functional areas.

Hill (1980) examined interpersonal needs as measured by the FIRO-B instrument in relation to choice of functional specialty among a sample of female business students. The results indicated a significant relationship between total need for interpersonal interaction and choice of specialty, with personnel majors preferring more active interpersonal relations and finance majors preferring less active, more distant personal relations.

Sullivan (1953) positioned personality as an interpersonal phenomenon. He considered personality "as a relatively stable pattern of interpersonal behaviors arising from interactions with others, especially during critical developmental periods". He affirmed that the human interactions are the source of interpersonal skills and sense of identity.

Five Factor Model is a psychological measure developed to assess the personality (intrapersonal traits) of the individual. (Costa and McRae, 1985; 1992; Wiggins, 1996). This perspective has labeled the following five factors: Extraversion, Neuroticism, Agreeableness, Conscientiousness, and Openness. The Big Five model was the basis for the Basic Factors Inventory (John and Srivastva, 1999), a 44-item measure of extraversion, neuroticism, agreeableness, conscientiousness, and openness. The model has been validated by different streams of researchers. (Wiggins, 1996).

The measurement of interpersonal constructs is considered complex than the measurement of personality as personality is a relatively permanent disposition. Measurement of interpersonal behavior requires that the person be viewed as interacting in a number of different situations. Insight into this perspective was provided by early analyses of group behavior (Lewin, 1947), in which it was argued that there are dimensions of interpersonal behavior that cannot be predicted by personality measures alone. This argument was further supported by Cattell (1948), who asserted that there was an interpersonal component of "syntality" that arose from interpersonal interaction. Syntality could not be predicted directly from measured personality traits. Instead, it was a distinct and relationship-specific phenomenon.

While researchers such as Leary (1957) and Kiesler (1996) have tended to focus on two-dimensional interpersonal models, there remains the issue of the minimum number of dimensions that actually exist. There is general agreement that the dimension of Dominance-Submissiveness is well established. However, there is considerable disagreement as to the components of positive and negative emotional aspects of interaction, since it is possible to interpret the dimension of positive and negative interactions as reflecting the existence of an additional component. Schutz (1958) advanced the Fundamental Interpersonal Relations Orientation (FIRO) system. Schutz posited the existence of three basic dimensions of behavior. "Control" reflects the person's dominance in the interaction--an individual elevated in Control tends to direct, lead, or manipulates the relationship; those persons low in Control tend to emit patterns of behavior that facilitate others to initiate dominance. Schutz made a critical distinction between two components of interaction involving the definition of an individual's role in a relationship. "Inclusion" addresses the issue of personal significance in an interaction. A person elevated in Inclusion is recognized as positively or negatively significant in an interaction. The third dimension is "Affection," a measure of the positive or negative emotional aspects of a relationship. Individuals elevated in Affection are emotionally bound to the relationship; those low in Affection have little emotional investment in the relationship.(As quoted in Mahoney and Stasson, 2005)

Schutz (1958) defined each of these components. Each aspect has an "Expressed" component and a "Wanted" component. Inclusion Expressed (IE) behaviors signify a desire to be a member of a relationship. Inclusion Wanted (IW) behaviors are internal desires to be included by another. If the person is socially competent, he or she will manifest appropriate matches in Expressed and Wanted aspects. Problems arise, however, for the individual who lacks the interpersonal skills to match Wanted and Expressed needs. Interpersonal incompetence arises from a disjunction in the level of expression versus wanting of a component.

The literature is mixed regarding evidence for the tripartite distinction posited by Schutz (1958). The three-dimensional model was developed by a careful analysis of self-reports. However, other researchers have failed to support a distinction between Inclusion and Affection (Gough and Bradley, 1996). This issue is further complicated by the subtleties inherent in assessment; indeed, it was argued that the failure to cross-validate personality or interpersonal measures founders on the actual structure of the language itself (Hofstead, DeRaad & Goldberg, 1992). Thus, the direct comparison of dimensions across linguistic communities presents problems.

Mahoney and Stasson (2005) studied 192 students for Big 5 & FIRO-B. The findings for the personality dimensions suggest that Extraversion is a pervasive aspect of relationships. The Scores for Neuroticism were positively correlated with Wanted Control but negatively correlated with measures of Extraversion, Agreeableness and Conscientiousness. The study concluded that the theoretical three-dimensional model of Inclusion, Control and Affection of FIRO-B scale might only be appropriate within relatively homogeneous groups. The distinction between Inclusion and Affection may be attenuated to irrelevance in less selective, or more diverse, populations.

2. Methodology

The present study has been undertaken to find out the relation between personality and interpersonal needs. The objective of the research is to analyze the impact of personality traits on interpersonal needs and thus coin the term "Personality Mapping" as the tool to analyze these needs. The personality traits help in identification of needs, which if identified can help in motivating the workforce and hence achieving Person-Job fit. Person-Job fit ensures higher individual performance and hence, higher organizational effectiveness. The data analysis has helped in developing the regression equation to facilitate objectivity in decision making. The research measures are the FIRO-B Scale and the Big 5 scales.

2.1 Instruments

The instruments used in this study were the Big Five Inventory and FIRO-B Scale. The Big Five Inventory consists of 44 items aggregately measuring five independent dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness.

The Big Five model of personality focuses upon those behaviors that one expresses while dealing with people, changing circumstances and the environment. The two remaining behavioral dimensions relate to work and depression situations.

Factor 1: Extraversion (E)

Extraversion is characterized by positive emotions, surgency, and the tendency to seek out stimulation and the company of others. Extraverts enjoy interacting with people, and are often perceived as full of energy. They tend to be enthusiastic, action-oriented individuals. They possess high group visibility, like to talk, and assert themselves.

A Higher Degree in 'E'

They are social, friendlier and talkative, often assertive and energetic. They are charismatic and prefer to lead others.

A Lower Degree in 'E'

They are considered private, serious, quiet and skeptic and don't rely on others easily.

Factor 2: Agreeableness (A)

How does one react to others' opinions? When you agree to them easily, you are considered agreeable. However, your strong reactions qualify you as a challenger in the words of Howard and Howard (2001).

A Higher Degree in 'A'

The model considers one as good natured, sympathetic and forgiving, tolerant, agreeable and courteous. This person proves to be an excellent team member. They strive to achieve harmony between their mates, are friendlier, approachable and appeasing. They can ignore their own needs for others'.

A Lower Degree in 'A'

Such individuals are critical, analytical and tough. They are expressive in their opinions. They don't hide their reactions. They want their efforts and achievements to be acknowledged. They can challenge the status quo and are born leaders.

Factor 3: Conscientiousness (C)

Conscientiousness is a tendency to show self-discipline, act dutifully, and aim for achievement against measures or outside expectations. The trait shows a preference for planned rather than spontaneous behavior. It influences the way in which we control, regulate, and direct our impulses. How do you take your work?

A Higher Degree in 'C'

As per the Big Five model of personality they are considered to be organized, focused and a timely achiever of their goals. They tend to be workaholics and are self-disciplined, confident, dutiful and reliable.

A Lower Degree in 'C'

They are careless, relaxed and unorganized. They don't plan things and pursue their goals with a flexible approach.

Factor 4: Neuroticism (N)

Neuroticism is the tendency to experience negative emotions, such as anger, anxiety, or depression. It is sometimes called emotional instability, or is reversed and referred to as emotional stability. How do you handle depression?

A Higher Degree 'N'

The Big Five model considers such people as nervous, unstable and vulnerable to negative emotionality. They are never satisfied with their life. They are reactive and often fail to recover from depression shock easily.

A Lower Degree 'N'

They are emotionally stable, strong nerved and composed person. They are often calm and optimist.

Factor 5: Openness to Change (O)

The model considers one open for change when one accepts new thoughts, ideas and changes.

However, one is considered close to change when one avoids new experiments and follows rules and regulations very strictly.

A Higher Degree in 'O'

The person high on this variable is considered as original, creative and curious. For them, change is more than essential for social evolution. They enjoy complexities of things and strive to find out the solutions. They can handle new systems, technologies and tools with great ease.

A Lower Degree in 'O'

They are resistant to change and traditional. They love a peaceful environment, secure jobs and a serene family life. They spend a lot of time on details and can execute plans very well.

FIRO-B

The FIRO-B is a 54-item instrument that measures six dimensions of an individual's behavior toward others: (a) Expressed Inclusion (eI), (b) Expressed Control (eC), (c) Expressed Affection (eA), (d) Wanted Inclusion (wI), (e) Wanted Control (wC), and (f) Wanted Affection (wA). This instrument can be self-administered and requires approximately 15 to 20 minutes to complete. Schutz (1967) originally developed the tool in the late 1950s to predict how military personnel would work together in groups. He first described his/her creation in his/her book, *FIRO: A Three-Dimensional Theory of Interpersonal Behavior* (Schutz, 1958). Ideas from the works of three distinguished psychologists—T. W. Adorno, Erich Fromm, and Wilfred Bion—are incorporated in the theory that underlies the FIRO-B (Schnell and Hammer, 1993, 2004).

The FIRO-B is a psychological instrument that has been constructed to explain how personal needs can affect various interpersonal relationships (Hammer & Schnell, 2000), but the developer has cautioned that there are some factors (i.e., cultural differences) that could affect a person's responses to the items. The developers (Hammer & Schnell, 2000) also noted that the scale has no right or wrong answers, and that no passing or failing scores are associated with the results. In addition, Hammer & Schnell (2000) asserted that the scale results should focus on learning and development in a nonjudgmental manner. They indicated that the report may provide understanding regarding the relationships among and between people and illustrate how other people may perceive them.

According to Schnell & Hammer (1993, 2004), practitioners who use the MBTI and the FIRO-B have found that both instruments can influence leaders to broaden their view of others. Rather than considering others as "difficult" or "problematic," the results of these instruments can be used to establish recognition of differences as opportunities to bring strengths inherent in diverse ways of thinking and behaving together. The instrument uses key components of the client's personality and hence provides valuable information to leaders about patterns over a variety of activities including communication, decision making, interpersonal relations, and group dynamics (Schnell & Hammer, 1993, 2004). In addition, Schnell & Hammer (1993, 2004) asserted that leaders are presented with opportunities to see that human behavior is complex enough to demand multiple perspectives, yet predictable enough that it can be systematized into understandable models, when they integrate the FIRO-B with the MBTI.

Reliability and validity. Comprehensive information on the Guttman scaling procedures which are the construction foundation for the FIRO-B instrument, and test-retest reliabilities can be found in the FIRO-B Technical Guide (Hammer and Schnell, 2000). The reliability coefficients of the samples are consistently described as limited but satisfactory (Hammer & Schnell, 2000).

Based on a simple model, the FIRO-B proposes that individuals are motivated by three interpersonal needs:

1) *Inclusion (I)*: a need to maintain relationships with others, to be included in their activities, or to include them in the activities of the individual.

2) Control (C): a need to maintain a balance of power and influence in relationships.

3) Affection (A): a need to form personal alliances with others (Schnell and Hammer, 1993, 2004).

Additionally, Schutz (1978) proposed that two dimensions of each need can be identified:

(a) The extent to which individuals are likely to *express* the associated interpersonal behaviors toward others and (b) the extent to which individuals *want* to receive those same interpersonal behaviors from others (Hammer and Schnell, 2000). The interactions between interpersonal needs and *expressed* and *wanted* behaviors form the six subscales (Schutz, 1978) that are measured from the individual's responses to each of the included statements.

The individual's scores are aggregated across the rows to obtain Total Expressed Behavior and Total Wanted Behavior scores, down each column for the Total Need scores, and over all of the individual cells to provide an Overall Need score (Schnell and Hammer, 1993, 2004). Scores in the six individual cells are estimates of "how much" each of the interpersonal dimensions is characteristic of the test-taker (Schnell and Hammer, 1993, 2004).

The Overall Need score (Overall Need = eI + wI + eC + wC + eA + wA) represents the overall strength of an individual's interpersonal needs (Hammer & Schnell, 2000). It shows how much a person believes that other people and intimate interaction can be a source of goal attainment and personal achievement (Schnell & Hammer, 1993, 2004). Higher scores indicate that a person is extensively involved with others, whereas lower scores indicate fewer interpersonal liaisons (Schnell & Hammer, 1992, 2004).

1993, 2004). The scores are generally interpreted as follows (Hammer & S. Schnell, 2000):

0 to 15 (Low): Interactions with others are minimal sources of need satisfaction.

16 to 26 (Medium-Low): Once in a while, interactions with others are sources of satisfaction.

27 to 38 (Medium-High): Interactions with others are usually sources of satisfaction.

39 to 54 (High): Interactions with others are enjoyable and satisfying.

2.2 Procedure

The hard copy of both the instruments was administered on the sample and data was then tabulated. All items for both instruments were scored on a 5-point continuum where "1" indicated complete disagreement and "5" indicated complete agreement. Pearson correlation coefficients were computed on the combined matrix of the 6 FIRO-B and 5 BFI scales.

2.3 Hypothesis

1) People high on Expressed variable are extroverts. Since extroverts are those who are social and talkative, it infers that they are being able to express themselves. Inclusion Expressed and Inclusion Wanted are positively related to Extraversion (r = .49 and r = .39, respectively). (Mahoney & Stasson, 2005)

2) People with a higher need for inclusion are agreeable. This conjecture is taken as it seems obvious that if someone works in group, s/he needs to be tolerant as s/he has to accommodate the others' viewpoints also. Inclusion Expressed is correlated significantly with Agreeableness (r = .23) (Mahoney & Stasson, 2005)

3) People high on the Wanted variable are high on Neuroticism. These are individuals who can't express themselves but have desires and if they are not understood by others, they become emotionally unstable. Wanted Control is positively correlated with BFI Neuroticism (r = .35). (Mahoney & Stasson, 2005)

3. Data Analysis

Hypothesis testing

1) People high on Expressed variable are extroverts

Expressed and extraversion is positively correlated (.287). Hence, the hypothesis is accepted.

2) People with a higher need for inclusion are agreeable.

The study accepts the hypothesis, as there is significant correlation between the need for inclusion and agreeableness (0.137).

3) People high on the Wanted variable are high on Neuroticism.

The correlation between wanted and neuroticism is 0.113, which is significant. Hence, the hypothesis is accepted.

The other observations are: (Table 2)

• A clear pattern emerged in the relations among the FIRO scales. The correlations between the Affection and Inclusion measures were quite strong (.561). In addition, the Wanted and Expressed levels of both Affection and Inclusion were highly correlated (.356 for affection and .335 for inclusion). Thus, participants did not seem to distinguish affection from inclusion, and seemed to desire and express similar levels of these relationship dimensions.

• EI is significantly related with WI (.335), WA (.202), EI (.255), Extraversion (.253), Agreeableness (.161) and Conscientiousness (.123).

• EC is significantly related with EA (.231), WI (.309) and WC (.136). It is negatively correlated to Agreeableness (-0.026)

• EA has positive correlations with WI (.187), WC (.157), WA (.356) and Extraversion (.112) and Conscientiousness (.092).

• Expressed is positively correlated to Extraversion (.287) and Conscientiousness (.119).

• WI has a positive correlation with WC (.191) and WA (.351). But there is no significant correlation with any of the Big 5 factors.

• WC is related to WA (.264), Extraversion (.198), Agreeableness (.146) and Conscientiousness (.115), Neuroticism (.274), Openness (.085)

• WA is related to Extraversion (.170).

• Wanted has a significant correlation with Extraversion (.195), Agreeableness (.100), Conscientiousness (.107) and Neuroticism (.113).

• Inclusion is related to Extraversion (.259), Agreeableness (.137), Conscientiousness (.151) and Neuroticism (-.073).

• Control has a significant correlation with Extraversion (.234), Agreeableness (.084), Conscientiousness (.127), Neuroticism (.214) and Openness (.071).

• Affect has correlations with Extraversion (.176) and Conscientiousness (.079).

• The sample is higher on "Expressed"(Mean=13.35)variables than "Wanted" (Mean=11.29) (Table 1)

• The need for Inclusion is highest (Mean=9.40) followed by need for Control (9.14). (Table 1)

4. Discussion

The FIRO-B Variables can be significantly predicted from the Big 5 variables, which is evident from Table 3 and 4 which shows regression of "Expressed" and "Wanted" variables respectively of FIRO-B, with the Big 5 variables. The regression equation for the "Expressed" variable can be:

Expressed= 11.502+0.294 (Extrovert) -0.068 (Agreeableness)

+.095(Conscientiousness)-0.043(Neuroticism)-.154(openness)

The regression equation for the "Wanted" variable can be:

Wanted= 8.029+0.202 (Extrovert) +.041 (Agreeableness) +.078(Conscientiousness) +

0.075(Neuroticism)-.207(openness)

The research proves that people with a need for affection are extroverts (.176) and conscientious (.079). Those who can express their need for inclusion should be able to communicate that and hence they have to be sociable and talkative, which is reflected in the study as People high on EI are high on Extraversion (.253). Such people are also high on Agreeableness (.161), as to form a group or team one has to agree with other members too. EC is negatively correlated to Agreeableness (-0.026), which strengthens the argument that people who want to control others are despots, as they try to impose rather than work by consensus. The relationship between EA and WA (.356) proves the well known saying –"affection is a give and take relationship".

The WC variable is positively related to Agreeableness (.146), which seems apt as if others control you, and then you have to be agreeable. The interesting relation exists between the want for control and neuroticism (.274), which means that such people are more emotionally unstable. Thus, if one has want but can't express, he becomes emotionally unstable but is ready to follow the rules of others.

The study affirms that Extraversion consistently have a strong correlations with all the six variables of FIRO-B scale. This seems very obvious as, extroverts would always be in need of increasing their social sphere and to maintain that he needs social skills. So, he has to have the strong interpersonal needs. On the contrary, Introverts have restricted social sphere and hence, restricted social interactions, which would not have high interpersonal demands.

5. Conclusion

The results of the research are similar to the earlier research as it proves that FIRO-B factors are correlated with the Big-five factors. The interpersonal needs can predict the personality of the

individual. All individual have interpersonal needs but all the needs are not dominant. If the dominant need is identified, the organizations can motivate the individual by satisfying his/her dominant need. So, the analysis of both i.e. interpersonal needs and the personality can help the organizations to find the Person- job fit and also help them in understanding the motivational aspects of the individual. The predictability of Interpersonal needs from the personality traits gives a clue to the employer about the Job which will best suit the personality of the prospective employee or in other words, which job would satisfy his/her dominant need. Organizational performance is the function of Job Satisfaction and if the needs are satiated, the satisfaction increases and hence the performance.

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Appendix

Table 1. Descriptive Statistics of the Big 5 & FIRO-B Variables

Descriptive Statistics								
	Ν	Minimum	Maximum	Mean	Std. Deviation			
EI	912	0	17	5.64	2.198			
EC	912	0	9	4.36	2.511			
EA	912	0	11	3.94	2.433			
WI	912	0	9	3.94	2.656			
WC	912	0	9	4.57	2.414			
WA	912	0	9	2.68	1.864			
Expressed	912	0	24	13.35	4.370			
wanted	912	0	24	11.29	5.101			
Inclusion	912	0	25	9.40	3.663			
Control	912	0	18	9.14	3.627			
affection	912	0	16	6.33	3.470			
ext	912	3	40	21.87	7.794			
agree	912	1	52	27.64	8.923			
consci	912	7	47	26.07	8.617			
neuro	912	6	40	19.61	6.534			
open	912	6	52	28.05	10.080			
Valid N (listwise)	912							

Table 2. Correlation

	Correlations																
		EI	EC	EA	WI	WC	WA	Expressed	wanted I	nclusion	Control	affection	ext	agree	consci	neuro	open
El	Pearson Correla	1	.255*	.118*	.335*	.145*	.202*	.582*	.375*	.757*	.219*'	.184*1	.253*	.161*	.123*	048	.037
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.144	.266
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
EC	Pearson Correla	.255*1	1	.231*	.309*	.136*	.175*	.630*	.446*	.476*	.641*	.204*	.168*	026	.086*	.035	.031
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.437	.010	.298	.349
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
EA	Pearson Correla	.118*	.231*	1	.187*	.157*	.356*	.613*	.353*'	.574*	.404**	.660**	.112*	.039	.092*	056	.071*
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.001	.238	.006	.094	.031
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
WI	Pearson Correla	.335*1	.309*	.187*	1	.191*	.351*	.424*	.753*	.382*	.426*	.345*1	.042	.008	.037	009	039
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.207	.800	.262	.794	.234
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
WC	Pearson Correla	.145*1	.136*	.157*	.191*	1	.264*	.369*	.583*	.212*	.631*'	.402*1	.198*	.146*	.115*	.274*	.085*
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	.011
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
WA	Pearson Correla	.202*	.175*	.356*	.351**	.264*	1	.419*	.678*	.395*	.218*	.817*	.170*	.019	.045	002	040
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.573	.179	.953	.227
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
Expresse	Pearson Correla	.582*	.630*	.613*	.424*	.369*	.419**	1	.544*	.734*	.640**	.641*'	.287*	.043	.119*	009	.029
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.197	.000	.789	.388
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
wanted	Pearson Correla	.375*1	.446*	.353*	.753*	.583*	.678**	.544*	1	.589*	.639*	.615*1	.195*	.100*	.107*	.113*	.018
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.003	.001	.001	.589
	Ν	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
Inclusion	Pearson Correla	.757*	.476*	.574*	.382*	.212*	.395*	.734*	.589*	1	.350**	.561*	.259*	.137*	.151*	073*	.080*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.028	.016
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
Control	Pearson Correla	.219*	.641*	.404*	.426*	.631*	.218*	.640*	.639*	.350*	1	.292**	.234*	.084*	.127*	.214*	.071*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.011	.000	.000	.031
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
affection	Pearson Correla	.184*	.204*	.660*	.345*	.402*	.817*	.641*	.615*	.561*	.292*	1	.176*	.019	.079*	027	.018
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.562	.016	.410	.595
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
ext	Pearson Correla	.253*1	.168*	.112*	.042	.198*	.170**	.287*	.195*	.259*	.234*'	.176*1	1	.651*	.686*	.384*	.705*
	Sig. (2-tailed)	.000	.000	.001	.207	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
agree	Pearson Correla	.161*	026	.039	.008	.146*	.019	.043	.100*	.137*	.084*	.019	.651*	1	.777*	.439*	.777*
	Sig. (2-tailed)	.000	.437	.238	.800	.000	.573	.197	.003	.000	.011	.562	.000		.000	.000	.000
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
consci	Pearson Correla	.123*	.086*	.092*	.037	.115*	.045	.119*	.107*	.151*	.127*	.079*	.686*	.777*	1	.441*	.819*
	Sig. (2-tailed)	.000	.010	.006	.262	.001	.179	.000	.001	.000	.000	.016	.000	.000		.000	.000
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
neuro	Pearson Correla	048	.035	056	009	.274*	002	009	.113*	073*	.214*	027	.384*	.439*	.441*	1	.469*
	Sig. (2-tailed)	.144	.298	.094	.794	.000	.953	.789	.001	.028	.000	.410	.000	.000	.000		.000
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
open	Pearson Correla	.037	.031	.071*	039	.085*	040	.029	.018	.080*	.071*	.018	.705*	.777*	.819*	.469*	1
	Sig. (2-tailed)	.266	.349	.031	.234	.011	.227	.388	.589	.016	.031	.595	.000	.000	.000	.000	
	N	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912

** Correlation is significant at the 0.01 level (2-tailed).

 * ·Correlation is significant at the 0.05 level (2-tailed).

EA = Expressed Affection EC = Expressed Control

EI = Expressed Inclusion WA = Wanted Affection;

WC = Wanted Control IW = Wanted Inclusion E = Extraversion;

A = Agreeableness; C = Conscientiousness; N = Neuroticism;

O = Openness

Table 3. Regression –"Expressed" as Dependent Variable and Big 5 Traits as Independent Variable

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	open, neuro, ext, agree, _a consci		Enter

a. All requested variables entered.

b. Dependent Variable: Expressed

Model Summary

			Adjusted	Std. Error of
Model	R	R Square	R Square	the Estimate
1	.396 ^a	.157	.152	4.024

a. Predictors: (Constant), open, neuro, ext, agree, consci

ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2731.103	5	546.221	33.740	.000 ^a
	Residual	14667.406	906	16.189		
	Total	17398.509	911			

a. Predictors: (Constant), open, neuro, ext, agree, consci

b. Dependent Variable: Expressed

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	11.502	.514		22.396	.000
	ext	.294	.025	.525	11.621	.000
	agree	068	.026	140	-2.616	.009
	consci	.095	.030	.187	3.171	.002
	neuro	043	.023	065	-1.855	.064
	open	154	.026	355	-5.867	.000

a. Dependent Variable: Expressed

Table 4. Regression–"Wanted" as Dependent Variable and Big 5 Traits as Independent Variable

Model	Variables Entered	Variables Removed	Method
1	open, neuro, ext, agree, _a consci		Enter

Variables Entered/Removed

a. All requested variables entered.

b. Dependent Variable: wanted

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.292 ^a	.085	.080	4.893

a. Predictors: (Constant), open, neuro, ext, agree, consci

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2014.767	5	402.953	16.829	.000 ^a
	Residual	21692.811	906	23.944		
	Total	23707.579	911			

a. Predictors: (Constant), open, neuro, ext, agree, consci

b. Dependent Variable: wanted

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.029	.625		12.855	.000
	ext	.202	.031	.309	6.562	.000
	agree	.041	.032	.071	1.277	.202
	consci	.078	.036	.132	2.152	.032
	neuro	.075	.028	.096	2.643	.008
	open	207	.032	408	-6.471	.000

a. Dependent Variable: wanted