Personality Profiles of Muslim Students

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Introduction

Studies on measuring the personality profile across cultures have been extensively done using a model known as Five Factor of Personality or Big Five. There is widespread agreement that this model is currently the best model for describing the taxonomy of personality traits (Digman, 1990; McCrae & Costa, 1996), although it has received a considerable number of challenges and scepticism (Block, 1995; Juni, 1996). The model has proposed that five basic factors constitute basic structure of human personality: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). This assertion has been supported, using different personality questionnaires, self-reports, and peer ratings, factoring procedures and sampling subjects (Costa & McCrae, 1988; McCrae & Costa, 1987; McCrae & John, 1992).

The most commonly used questionnaire measuring the five factors is the NEO PI Personality Inventory (Costa & McCrae, 1985) and its revised version, the NEO PI-R Personality Inventory-Revised (Costa & McCrae, 1992). Longitudinal studies using the original normative sample indicate a 3 to 6 year stability coefficients of the NEO-PI scales ranging from .68 to .83. The internal consistency reliabilities for major domains were .93, .87, .89, .76, and .86 for N, E, O, A and C, respectively (Costa & McCrae, 1988). The revised version, tested among 1539 American adults yielded a comparable reliability coefficients of .86, .77, .73, .68, and .81 for the same corresponding NEO domains (Costa & McCrae, 1992).

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Previous studies using Big Five

Studies have shown that the Big Five model is replicable in either Western or Asian cultures but its existence in cultures that have not yet been studied should be investigated. Paunonen and colleagues (1992) have suggested that more research is needed on the Big Five model with specific emphasis on "cultures where values, socialization practices, and lifestyles are substantially different" (p. 455). In other words, the generalizability and stability of the Big Five model would be much stronger if the structures are replicated within a culture having a different social, religious and economic atmosphere. Taking this justification, personality of the Muslim culture is one of them. The present study therefore aims to examine personality traits of the Muslims using the Big Five model.

Personality traits as mentioned in the Quran and Sunnah

Personality in Islam is normally linked to the realm of akhlaq including moral conduct, character and behavior, which are explicitly explained in the Quran and the Sunnah. It seems that the term of personality is used interchangeably with *akhlaq*. A brief review of some of Islamic ethical and moral teaching related to this are therefore necessary at the beginning in order to assist us understand some of the basic personality characteristic of Muslims.

Kadir (2000) in his book "Commanding a dynamic Islamic personality" devoted one chapter on explaining some of the basic personality of Muslims. There are good deeds, righteousness, kindness and charity, truth, rightness, manners and courtesy, humility and moderation, patient and perseverance. He also mentioned that Muslim should work conscientiously, strive wholeheartedly, and excel honestly in every aspect of life. Manzurul Huq (1999) discusses the innate nature of human being that shape one's personality. An optimal and integrated function of human personality leads to the 'actualization of his divine potentialities as the vicegerent of Allah' (p. 22). He stresses the importance of linking the basic understanding about human nature with the religion as the guiding principle. Mufti Ahmed Ebrahim Bemat (1994) wrote a book describing the nobel personality of Rasulullah saw especially the humbleness and patience. In a nutshell, personality described in many Islamic books may mean both, as an innate character and also as a moral, *akhlaq* of a person.

In the present study, we aim to find out whether the Big Five model able to explain some of the basic human personal attributes within Muslim society. Malay Muslims in Malaysia were selected as the sample in the study. It is appropriate to briefly review the influence of Islam on Malay culture and society first.

Islam and Malay culture

Among Malays, Islam constitutes a key element in ethnic identity and therefore has

critical impact on the development of Malay culture. Almost all Malays are Muslim, and a Malay who rejects Islam is no longer legally considered a Malay. Since Independence in 1957, Islam had been adopted as 'the religion of Federation'. This establishes Islam as the official religion of the country and the main emphasis of such status is to maintain harmony and co-operation between Malays and the other ethnic people in the country. As defined by the Federal Constitution of Malaysia "A Malay is a person who professes the religion of Islam, habitually speaks the Malay language [and] conforms to Malay custom".

Generally speaking, Islam permeates every facet of life of the Malays, especially in the realm of moral values and behaviour. In the realm of value, the Malays rely heavily on religious sources. As Islam teaches that the divine law is immutable and absolute, it is very rare to see the Malays to oppose the absoluteness of values written in the Quran and the sayings of the prophet Muhammad saw. Thus, some values are already specified and unchangeable. For example, Malay people may not easily change their views on the unlawfulness of alcoholic drinks and premarital sexual relationships. Alternatively, there are also values that are not specifically mentioned in the religious divine sources such as recent developments in genetic engineering and other new phenomena. These sorts of values, whether they are right or wrong, are thus determined through a delicate discussion by the concerned authorities and religious scholars. The final say, nevertheless, must be in congruence with the basic guidelines set in the Quran.

Islamic teaching also has a deep influence on aspects of behaviour. For example, Malays are accustomed to salute other Malays with a 'salam', a special greeting taught by religious teaching. Salam is normally followed by a handshake and both parties lightly touch their own chests with the fingers of both hands. Guided by Islamic values, this handshake is only performed between members of the same sex. Malays are also taught not to say anything that may hurt others' feelings and are thus prone not to criticize others openly in public, which is also part of Islamic ethical teaching.

The second factor is the customary tradition of Malay people themselves. Malays have a strong sense of community spirit and they place great emphasis on mannerism or adab. Being helpful, polite, considerate and courteous is among the characteristics of typical traditional Malays. Above all, these characteristics are within the Islamic teachings as well. Most of the Malay *adab* are in consistent with Islamic ethical and behavioural teaching.

In his analysis of verbal linkage to the Malay culture, Goddard (1997) found that Malays were concerned about others' feelings. They were also concerned about the coherence of their words and actions with the social and religious norms in that they should not oppose the norms. Thus, one should think before one speaks so as not to hurt others' feelings. Malay Muslim speakers therefore tend to be very careful about commenting or opposing others' views. Malays who speak loudly are considered impolite and such behaviour is considered a sign of negative emotion. These are all Islamic in the essence.

Another basic concept of Malay culture, yet Islamic, is the social emotion of *malu*: "shame, propriety". Malays regard a sense of *malu* as an element of basic goodness in society while Islam sees *malu* as part of faith (iman). Swift (1965) equates malu with "hypersensitiveness to what others people are thinking about oneself" (p.110). Malays, belonging to Islam, accept shame or *malu* as virtuous although this does not mean that being shameful at all times is recommended. For example, for a young lady to feel shame when being introduced to her future husband is virtuous. But shame is no longer virtuous if one is shamed into doing the right thing. This cultural difference or ethnocentrism on the concept of shame or *malu* may have an impact on the analysis of the personality traits related to that concept.

Purpose of the Study

The present study had two main purposes. First, the study was to examine whether the personality factors of the Big Five model would be found in the Muslim culture. Secondly, data on personality factors were used to explain some of the important personality attributes possessed by Muslims by means of the mean level analysis of some factors and facets. For example, levels of Neuroticism can be used to explain why the Muslim is so sensitive to what they say and do. Extraversion level can also explain why the majority of Muslim people consider *malu* or shame as crucial. Agreeableness scores can explain why Muslims tend to avoid making extreme counter-argument so as not to hurt others' feelings. Openness scores may be linked with the fact that Muslims are quite closed to some items related to issues of values. The Conscientiousness scores may give an indication on whether Muslims are supposed to be deliberate, hard working and self-discipline people.

In the present study, one special feature of Muslims is that they have a strong dogmatic attachment to the discussion of values. Some value-related items in the NEO PI-R questionnaire were expected to pose difficulties in the translation process and consequently in the corresponding results.

Method

Subjects

Samples were 451 Malay Muslim students (124 males, 327 females) enrolled in the matriculation program in Malaysia. The students were graduated from two major types of schools: religious schools (n=237) and non-religious schools (n=214). These students were involved in a larger scale of study dealing with personality and academic major decision-making. The students' age range was from 18 to 20 years.

Measures

The present study used a translated Malay version, which was based on an original version of the NEO Personality Inventory-Revised (NEO PI-R)(Costa and McCrae, 1992). Psychometric assessment of the translated instrument has been documented recently (Mastor, Cooper & Jin, 2000). The overall alpha coefficients of the Malay NEO PI-R domain scales were 0.87, 0.86, 0.69, 0.82, and 0.91 for N, E, O, A and C, respectively. This inventory consists of 240 items, developed through rational and factor analytic methods, and measures five major domains of personality: Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness. It takes about 40-50 minutes to complete the questionnaire.

Data Analysis

Three main types of analysis were carried out to measure the psychometric compatibility of the translated NEO PI-R: Item analyses, reliability of the domains and facets and factorial analysis of the facets using varimax and Procrustes rotations. Mean level comparisons were carried out using a t test between Malay Muslims and the American college students.

Result

Table 1 shows the factor loadings of the facets on corresponding domains. The Conscientiousness, Neuroticism and Agreeableness dimensions were replicated well; each of the relevant scles and its highest loading on the appropriate factor. There were also a few secondary loading on N2 Angry Hostility, N5 Impulsiveness, N6 Vulnerability, E3 Assertiveness, and A3 Altruism. The facet E3: assertiveness item loading was spread across Factor 1, Factor 2, Factor 4 and Factor 5. The results indicate that assertiveness has a negative loading on Neuroticism and Agreeableness and positive loading on Extraversion and Concientiousness, a pattern similarly observed in American, German, Portuguese, Hebrew, Chinese, Korean and Japanese culture (McCrae & Costa, 1998). It appears that in these cultures, assertive individuals tend to be high in E and C and low in N an A. The implication is that assertiveness is associated with being not vulnerable or impulsive. On the other hand, assertiveness may also be associated with competence or achievement in that one who is assertive is belieced to hve a strong will for success.

To determine whether these structural discrepanciens, especially on 04 and 06, were due to arbitary rotational differences or whether there are real cultural differences, two further analyses were done. First, the Malay sample was divided into two subgroups. The first subgroup was students graduated from religious schools and the second subgroup was students graduated from non-religious school. The NEO PI-R scales were then factor analyzed for the two samples separately. secondly, using the whole Malay sample, we performed a Procrustean rotation (Schonemann,

1966) in which our varimax solution was rotated to a target matrix based on Costa and McCrae's (1992) varimax structure in the US normative sample. We then calculated the congruence coefficients across the domains and facets to ascertain the degree of fit between the rotated solution and the target matrix (McCrae, 1992). In the first analysis, we extracted five principal components and performed varimax rotations in each of the two subgroups. The two five-factor solutions produce different eigenvalues for religious samples are 7.07, 3.91, 2.04, 1.85 and 1.45 while the eigevalues for non-religious sample are 8.15, 3.68, 2.40, 1.84 and 1.41. Table 2 shows the differences in loadings between these two subsamples respectively.

In both of the subgroup samples, the NEO Conscientiousness, Neuroticism and Agreeableness dimensions were replicated well, but not some of the Openness and Extraversion facet item loadings. Factor loading were absent for O6 in both samples but O4 does work in the non-religious sample. Items for O4: Openness to Actions were likely to be appropriate for the non-religious school students. It seems that the nature of the sample influences the results of the study. Overall evaluations, however, indicate that, except for the Openness scales, especially O4 and O6, other factors and facets work clearly in the Malay culture.

Comparison with the American Data

From the earlier analysis, we have shown that the Malay Muslim personality structure resembles the five-factor dimensions originally discovered among Americans. Results from the reliability and factor analysis of the NEO PI-R Malay version show a comparable factor structure similarity, and thus mean level comparison can be carried out. Although according to McCrae, Yik, Trapnell, Bond and Paulhus (1998), mean level comparison is appropriate only if there is a parallel scalar equivalence between the original and the translated version of NEO PI-R instruments, such a comparison may give a tentative picture of how Malay Muslim and American differ in their personality. Table 3 shows the comparison of mean scores of factors and facets between Malay Muslim and American college-age students.

At the factor level, Malay Muslim score higher than Americans on Neuroticism, Agreeableness and Conscientiousness. American college students score higher on Extraversion and Openness to Experience. At the facet level, Malay Muslims score lower on N2: Angry Hostility and N5: Impulsiveness than American college students. American are more extravert in all aspects, as they score higher in all Extraversion facets than Malays. Similarly, American students are more 'Open' as they score higher on five Openness facets than Malays, except for O4: Openness to Actions. On the other hand, Malays are more Agreeable people than Americans. Five of the Agreeableness facets of the Malays are higher than the American except for the A3: Altruism. Comparison of Conscientiousness facets shows that Malays score higher than American students in four of the facets. American students score higher in C1: Competence and C5: Self-discipline.

Discussion

An important premise in the Big Five model of personality is that human personality structure is universal, regardless of differences in cultural, including religious background. We have attempted to confirm this in the Malay Muslim culture. There are two significant findings in this study. First, we have shown that Malay Muslim personality structure is retrievable in the Big Five model. Secondly, personality-trait profiles can provide empirical evidence on the typical personality description of a particular culture in the literature, in the present case, the Malay Muslim. There are two major pieces of evidence that allow us to claim the first finding. The first evidence is the reliability coefficients of all factors and most of the facets. Preliminary study by Mastor et al., (2000) shows that the domain reliability coefficients are within the acceptable standard. Such results indicate that the Malay version of the NEO PI-R is a reliable instrument for measuring the Big Five personality factors in the Malay Muslim society. Thus, in case of Muslims in Malaysia, Big Five model seems compatible although further studies should be conducted among other Muslims of different ethic background for testing the universality of the model.

The second piece of evidence comes from referring to the results of the exploratory factor analysis. Church and Burke (1994) recommend that exploratory factor analyses be used as evidence for the cross-cultural generalizability of a factor model when good replicability across cultures is found. The analysis shows that the five-factor solution was observed in the Malay Muslim people. Similar replication was also found in this study of the emergence of secondary loading in the distribution of item loading in the analysis. For example, N2: Angry Hostility has a negative secondary loading on Agreeableness. This pattern was expected, because, generally people who easily or often get angry find it difficult to agree with other people. Similarly, A3: Altruism has a positive secondary loading on E: Extraversion. This is an indication that, in Malay Muslim culture, those who are caring and compassionate are those who also like to meet other people. This the quality that is compatible for those involved in the work of dakwah and counseling.

In this study, both varimax and Procrustes solutions support the cross-cultural generalizability of the NEO Five-Factor Model in the Malay Muslim context. The most definitive and clearly represented domains in the Malay Muslim culture are Neuroticism, Agreeableness and Conscientiousness. Their congruence coefficients are greater than 0.90, indicating high congruency between the translated scales and the original NEO PI-R scales. Two facet scales, however, may be culture specific: O4 Openness to Action and O6 Openness to Values, having .59 and .62 congruence coefficients, respectively.

Assuming that the scales were accurately translated, one possible explanation might be culture-specific. For Western perspectives, indicated in the original English version, "openness to values" means not to restrict ones opinion to dogmatic teaching such as religion. However, this is not the case for Malays, or to be more specific, the Muslims. Muslims look upon values as being associated with religious,

syariah teachings. Islam emphasizes the immutable principles of values of specific conduct or behaviour. In Islam, one who refers his or her judgment to religious teaching is considered to be an "open person". Open in the sense of someone who follows religious law and rules. On the other hand, those who negate religious opinion are regarded as "closed persons". Closed here is meant to 'close' oneself from true guidance.

This is consistent with the notion that culture, in this case, Islam, in general become the determinants of what is different, because they include a worldview based on the beliefs and perception of people, groups or identity groups (Galanti, 1991). Culture also, according to McCrae and Costa (1996) "guides the expression of personality in thoughts, feelings and behaviors" (p.184). Another possibility is that O4 and O6 are really not parts of Openness in the Malay Muslim culture. The meaning and use of Openness in such a collectivist culture as the Malay Muslim society may differ from that in the West and therefore have an effect on the psychometric values. But in general, with 28 out of the 30 facets showing significant high congruency, the support for cross-cultural generalizability of the Big Five Model is quite clear.

The second part this discussion is related to the mean score levels of the personality facets and factors and their role in supporting the typical personality description of the Malay people. The results show that Malay Muslims in general scored slightly higher on some of the Neuroticism facets than Americans. Malay Muslims scored higher in N1: Anxiety, N3: Depression, N4: Self-conscientiousness and N6: Vulnerability, but lower in N2: Angry Hostility and N5: Impulsiveness. Some studies on the Malay culture may offer an explanation for this finding. Swift (1965) found the cultural concept fundamental to Malay interaction is the social emotion of propriety that Malays were so much concern about what other people think about themselves. High scores on the Self-consciousness facet may reflect this nature of the Malay people. Also, a low score on Angry Hostility is consistent with a finding that Malays get along with people without friction (Goddard, 1997).

Malays were also found to score highly on the Agreeableness. As Goddard (1997) found in his studies, Malays prefer to avoid interpersonal conflict. They do not speak their disagreement openly. Such description of soft personality reflects the supposedly Muslim personality as mentioned in the Quran and Sunnah. However, being curious about what other people might say about one's behaviour or action may refer to some of specific traits of Malay. This is related to the fact that Malays are self-conscious in that they are aware of what other people will say about themselves. For Malays, being agreeable is one way to please other people. Further studies in other Muslims people may produce different results.

As we saw in the Table 3, American students are more extraverts than Malays. The mean score on E5: Excitement Seeking is very low in our results. This does not mean that Malay people do not enjoy themselves.. The small reliability coefficient for this facet may signal that items constructed in the translated NEO PI-R do not

appropriately construct to measure of the intended trait. The issue of cultural norms in defining what is excitement and enjoyment may influence responses in personality questionnaires such as the NEO PI-R. For Muslims, enjoyment is allowed but it has limitation, taking into consideration the basic principle of syariah. For example, to spent time in playing games to the extent of leaving the prayer is no longer a *mubah* or allowed. Some items in the NEO related to this aspect may need revision for the use of Muslim culture.

Data on E3: Assertiveness appears to show that Malays were less assertive in comparison with Americans. Although it seems that being assertive is a virtuous in the Malay culture, it is difficult for someone to express views directly and openly (Goddard, 1997). This is to show that assertiveness is valued when it is done at individual basis and not to be expressed openly. Goddard (1997) says that "cultural norms may be followed by some of the people all of the time, and by all of the people some of the time, but they are certainly not followed by all of the people all of the time" (p.199).

Also, we found that Malays score low on almost all Openness facets. As we expected, the score on O6: Openness to Values were very low compared with the same facet score in American samples. Dogmatic attachment to values may explain why Malays were not 'open' to the issues of values. But we can also see the Malays score slightly higher in O4: Openness to Actions than the Americans. As this facet refers to willingness to try doing different foods, visiting new places and trying new hobbies, such higher score in Malays are not surprising. Sulaiman (1981) listed some salient characteristics of Malay people. For instance, Malays like diversity in making their life interesting. They like such diversities as long as they are in congruence with the Malay and Islamic values.

Results concerning Conscientiousness scores were also interesting. Malays score higher in four corresponding facets, in that Malays are people with strong will and determination, well ordered, dutiful, achievement-striving and deliberate. But Americans score higher in competence and self-discipline. Although Malay students claim themselves to be more conscientious, they have low self-confident and are more conscious when with others. This serves as an initial picture on how Malays and American differ in their personality dimensions. More rigorous tests and appropriate research designs are needed, however, to show personality differences of various cultures as in the study of McCrae and associates (1998).

In conclusion, the results obtained in this study are encouraging with respect to the reliability and validity of the Malay version of the NEO PI-R, particularly for the Neuroticism, Extraversion and Conscientiousness factors. However, evidence for the reliability and validity of Openness to Values and Openness to Action does not rule out the possibility that there may be a culture-specific dimension of Openness in the Malay Muslim culture. This argues that, in addition to translating the original NEO PI-R into the Malay for use in understanding the Malay and Muslim personality at one time, it is also important to explore emically, aspects of personality traits that

may be indigenous to Muslim people. Overall, the present research provides support for the existence of the Big Five model of personality in Malay culture, specifically the Malay Muslim. It is recommended that subsequent research in the area of personality profiles be conducted among non-Malay Muslims as well to reflect their cultural variations.

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Table 1: Principal Component Analysis Using a varimax Rotation of the Malay NEO PI-R facet scales

Malay NEO	Varim	ax Factor				
PI-R Facets	d Eacto	r 2 Factor	3 Factor	4 Factor 5	Communa	ality
- Observation (Control of Control				.03	17	.62
N1:Anxiety	.75	12	11	.03 60	17 07	.70
N2: Angry Hostility	.51	21	.14		07	.64
N3: Depression	.66	18	.12	.06 .04	39 .02	.54
N4:Selfconsciousnes	.69	08	.06			• • •
N5: Impulsiveness	.41	.19	.16	45	36	.59
N6: Vulnerability	.59	14	10	17	46	.64
E1: Warmth	20	.76	.15	.21	.20	.74
E2: Gregariousness	07	.73	16	.11	.11	.59
E3: Assertiveness	43	.50	.16	19	.40	.67
E4: Activity	14	.38	.04	32	.37	.56
E5:Excitement seeking	11	.43	.22	34	11	.43
E6:Positive emotions	06	.72	.14	10	.23	.61
O1: Fantasy	11	.01	.61	26	29	.62
O2: Aesthetics	03	.07	.67	.08	.05	.55
O3: Feelings	.31	.21	.61	18	.15	.57
O4: Actions	06	.18	.05	03	.16	.07
O5: Ideas	29	03	.52	.13	.34	.65
O6: Values	04	.10	.07	12	.10	.04
A1:Trust	20	.22	.04	.62	.07	.48
A2: Straigthforward	.08	30	10	.64	.24	.62
A3: Altruism	09	.49	.15	.44	.39	.64
A4: Compliance	03	00	09	.78	.10	.63
A5: Modesty	.30	35	11	.53	09	.52
A6: Tendermindedness	.21	.29	.28	.54	.15	.54
C1: Competence	31	.29	.09	08	.71	.70
C2: Order	.05	.12	04	.14	.78	.66
C3: Dutifulness	06	.07	.12	.28	.75	.68
C4: Achievement	06	.23	.07	01	.77	.70
C5: Self-discipline	33	.10	06	.02	.72	.66
C6: Deliberation	14	.03	02	.32	.71	.63

Note: NEO PI-R: Neuroticism, Extraversion, Openness Personality Inventory-Revised; N=451. Loadings > .40 are in boldface type.

Table 2: Principal Component Analysis Using a varimax Rotation and corresponding eigenvalues of the Malay NEO PI-R facet scales on subgroups of religious (R) and non-religious (NR) samples

Malay NEO PI-R Facets	Varimax Factor Loadings									
PATE OF THE PATE O	Fa	ctor 1	Factor 2		Factor 3		Factor 4		Factor 5	
	R	NR	R	NR	R	NR	R	NR	R	NR
N1: Anxiety	.73	.72								
N2: Angry Hostility	.38	.60					69	54		
N3: Depression	.59	.68								
N4: Selfconsciousness	.72	.68								
N5: Impulsiveness	.38	.46					49	38		
N6: Vulnerability E1: Warmth	.57	.59	.80	.70					45	46
E2: Gregariousness			.73	.68						
E3: Assertiveness E4: Activity	45	39	.32 .33	.64 .43					.47	.36
E5: Excitement seeking			.37	.53						
E6: Positive emotions			.74	.70						
O1: Fantasy					.60	.42				
O2: Aesthetics					.65	.76				
O3: Feelings					.65	.41				
O4: Actions					.07	.47				
O5: Ideas					.49	.67				
O6: Values					.12	.12				
A1: Trust							.60	.66		
A2: Straigthforwardnes	s						.63	.57		
A3: Altruism				.49	.41		.36	.59		
A4: Compliance							.79	.76		
A5: Modesty							.55	.41		
A6: Tendermindedness						.50	.62			
C1: Competence									.74	.66
C2: Order									.77	.78
C3: Dutifulness									.74	.77
C4: Achievement									.79	.78
C5: Self-discipline									.72	.73
C6: Deliberation									.70	.69

Table 3: Comparison of NEO PI-R factors and facets between Malay Muslim and American college-age students

	Malay Muslim (N=451)		American (N=389)		
The second secon	Mean	SD	Mean	SD	
N: Neuroticism	100.4	17.6	96.3	21.9	
E: Extraversion	107.3	17.0	121.2	18.2	
O: Openness to Experience	104.5	12.0	116.8	17.8	
A: Agreeableness	123.4	15.3	113.5	16.6	
C: Conscientiousness	119.5	19.6	114.5	21.1	
N1: Anxiety	18.7	4.4	17.5	5.0	
N2: Angry Hostility	14.5	4.9	16.0	5.1	
N3:Depression	16.9	4.1	15.3	5.7	
N4:Selfconsciousnes	20.2	3.4	16.4	4.7	
N5: Impulsiveness	16.5	4.1	18.4	4.3	
N6: Vulnerability	13.5	4.3	12.8	4.4	
E1: Warmth	20.9	4.1	23.2	4.3	
E2: Gregarious-ness	16.9	4.6	19.2	5.1	
E3: Assertiveness	15.2	4.4	17.0	5.1	
E4: Activity	16.7	3.4	18.8	3.8	
E5: Excitement seeking	16.8	3.3	21.5	4.0	
E6: Positive emotions	20.6	4.5	21.5	4.1	
O1: Fantasy	16.1	3.5	20.1	4.8	
O2: Aesthetics	18.2	4.5	18.6	5.6	
O3: Feelings	19.6	3.4	22.4	4.3	
O4: Actions	16.6	3.2	15.8	3.5	
O5: Ideas	18.9	4.2	19.1	5.0	
O6: Values	15.0	3.2	20.8	3.7	
A1: Trust	18.8	3.7	18.7	4.4	
A2: Straightforward-ness	20.4	4.5	18.3	4.8	
A3: Altruism	21.9	3.6	23.2	3.6	
A4: Compliance	18.6	4.5	15.6	4.4	
A5: Modesty	19.2	4.2	18.0	4.5	
A6: Tenderminded-ness	24.6	3.2	19.8	3.3	
C1: Competence	19.0	3.7	21.1	4.0	
C2: Order	21.1	4.4	17.8	4.9	
C3: Dutifulness	22.5	4.1	21.2	4.1	
C4: Achievement	21.3	4.4	18.9	4.9	
C5: Self-discipline	16.1	3.9	18.9	5.1	
C6: Deliberation	19.5	4.1	16.6	4.5	