

Prediction of Self-actualization Based on Personality Traits and Self-Awareness among Gifted Students

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Abstract

Background: Gifted individuals have exclusive personality traits and need various experiences to achieve more information about themselves and their ability into developmental process from giftedness to talent. Also, they can increase mental experiences and obtain greater self-actualization with recognition of the level of challenges, values and their personality traits. The aim of this study was to assess the relationship between personality traits, self-awareness and self-actualization dimensions.

Methods: This descriptive study was conducted in Shiraz city among 239 gifted students from high schools during 2013. The Big Five Personality Questionnaire (BFPQ), Self-Consciousness Scale (SCS) and Measure of Actualization of Potential (MAP) were used to gather the data. Validity and reliability of these tools were acceptable. Data were analyzed by regression test using SPSS v19 statistic software.

Results: The finding showed that agreeableness ($r=0.34$) and conscientiousness ($r=0.41$) factors (from five factors of personality) had a positive relationship and neuroticism ($r=-0.21$) had a correlation with self-actualization negatively. Moreover, the privative self-awareness ($r=0.41$) and public self-awareness ($r=0.15$) showed a positive correlation and social anxiety revealed a significant negative relationship ($r=-0.27$) with general self-actualization. On the other hand, privative self-awareness and agreeableness predicted that 23% of the scores belong to openness to experience dimension (self-actualization) positively. In addition, conscientiousness and privative self-awareness predicted self-reference dimension positively, and neuroticism predicted it negatively. These variables determine 40% of the scores of self reference dimension. Also, conscientiousness, agreeableness and privative self-awareness predicted that 36% of the scores belong to general self-actualization.

Conclusion: Based on our study results, conscientiousness and agreeableness factors (personality traits) had a significant relationship with self-actualization and predicted the scores of self-actualization. It was noted that privative self-awareness (self-awareness dimension) had a significantly positive correlation with self-actualization and predicted its scores.

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Introduction

Gifted students are an interesting issue for psychologists and educators due to their talents. Different models of giftedness and talent have been proposed by scientists. One of the most important models was described by Gagne. This model assigns a distinction between giftedness and talent. Giftedness, as an aptitude, can be developed toward talent through environment and other factors whereas talent is a term that designates raw materials and final output of the developmental process.¹ In giftedness to talent direction, a person requires a set of internal factors such as personality, motivation, and peripheral conditions for actualization of giftedness completely. Character includes personality traits, self-awareness, and well-being as motivation including needs, interests, and values.² Investigation on the personality scope leads to further identification of personality traits and actualization of their talents. Many researchers have evaluated the role of personality features in growth of potential talents and self-actualization attainment (Pufal & Struzik,³ Hall & Haslam,⁴ Bochniak,⁵ Boeree,⁶ Vitters,⁷ Ryan & Deci.)⁸ These researches have shown a complex relationship between some of the personality traits and self-actualization. Self-actualization is one of the basic hypotheses with a humanistic approach that is interpreted as substantial motivation for perception and actualization of individual abilities.⁹ Self-awareness attainment is an important factor to improve potential talents and self-actualization.¹⁰ Each person can discover its values if he/she knows about talent, competence, weakness and strong points and individual personality traits. Self-awareness has been considered as a scale of psychology since 1960.¹¹ It means perceiving motivation, preferences and personality. Also, it indicates how these factors affect judgment, decisions and personal interactions.¹⁰ Many studies conducted about the relationship between personality traits and self-awareness showed that some of personality traits such as extraversion, openness to experience and agreeableness have correlation with self-awareness.¹² Social-personality model was one of the most widely used models into self-awareness episode that has been proposed by Morin¹¹ and Fenigstein.¹³ They have considered three dimensions for it, i.e. public self-awareness, private self-awareness, and social anxiety.¹⁴ The knowledge about personality traits of gifts, opportunity and variant experiences was important in self-awareness and self-actualization achievement.¹⁰ The aim of our study was evaluation of the correlation between personality traits and self-awareness dimensions and also the role of these variables in predicting self-actualization and general self-actualization dimensions among gifted students. Other objectives were assessment of prediction openness to experience and self-reference dimensions based on personality traits and self-awareness dimensions in this group. All individuals, especially students that have excellent talents, can be affected through the type of educational system for increasing

their abilities. Education should be designed according to a curriculum that considers self-actualization and individual differences. Our study can assist authorities to plan the best program for students.

Materials and Methods

This study was a descriptive correlation research conducted on 239 students (first class) from Shiraz Gifted Schools including two high schools (119 male and 120 female with the mean age of 14 years old) during the academic year of 2013. These schools are affiliated to the first educational district of Shiraz. Systematic sampling method was employed in our study. This study was coordinated with authorities in the Department of Education and schools principals. Also, consent forms were filled out by participants according to ethical guideline. The data were analyzed by multiple regression test. A p-value of <0.05 was considered as the statistically significant difference.

Research Tools

The study tools were questionnaires including the Big Five personality model,¹⁵ Self-awareness Scale (SAS) and Measure of Actualization of Potential (MAP).^{16,17} In the Big Five Personality model Questionnaire, the big five was used to measurement the personality traits. This fifty-item questionnaire was translated into Persian and then validated by Khormayi. Subsequently, we carried out factor analysis method upon it and items 23, 36, 41 and 47 were deleted due to poor factor loading; the final questionnaire was prepared as a 46 items questionnaire. The response format consisted of a 5-point Likert-type scale (1=strongly disagree to 5=strongly agree).¹⁸ The current tool focused on five independents factors corresponding to big five model.¹⁵ These factors were extraversion, agreeableness, conscientiousness, openness to experience, and neuroticism. In this research, validity was obtained through the correlation coefficient related to the item and its factor. The correlation coefficient was 0.36 to 0.80 ($P < 0.0001$) that is indicative of internal conformity into the scale. Cronbach's alpha was used to determine the reliability. Cronbach's alpha levels in Costa & McCrae¹⁹ were 0.68 to 0.86, but in our study for extraversion, agreeableness, conscientiousness, openness to experience and neuroticism dimensions it was 0.75, 0.86, 0.76, 0.72 and 0.83, respectively; this is indicative of the considerable reliability of this scale.

Self-Awareness Scale (SAS)

SAS was used to measure self-awareness that was validated by Seif & Latifian.^{16,20} AS contained 24-items that estimated the private and public self-awareness dimensions as well as social anxiety. The response format consisted of a 5-point Likert-type

scale (1=strongly disagree to 5=strongly agree).¹³ Fenigstein¹³ and Avesc²¹ studied the SAS validity through factor analysis method and their results revealed that SAS scale has an acceptable validity. In this study, validity was distinguished through factor analysis method and this scale focuses on the private and public self-awareness and social anxiety factors. The specific values for these factors were 3.34, 2.17 and 3.12, respectively; this determined only 37.52% of the SAS scores. Cronbach alpha was used to determine the reliability. Cronbach alpha levels in the study by Fenigstein for private and public self-awareness and social anxiety were 0.84, 0.79 and 0.73, respectively, but in this study they were 0.60, 0.75 and 0.76 which is indicative of the desirable reliability of this scale compared to that of Fenigstein.¹³

The Actualization of Potential Scale (APS)

The early version of APS was provided and validated by Lefrancois. This scale contained 27 items that assessed the openness to experience and self-reference dimensions. The openness to experience was divided into openness to life, openness to itself, and openness to others. The self-reference was divided into consistency and spontaneous components. This scale was translated and adopted into Persian by Mohaghegh. The response format comprised of a 5-point Likert-type scale (1=strongly disagree to 5=strongly agree), according to Lefrancois.¹⁷ Scoring was done upon the self-reference and openness to experience dimensions and estimated self-actualization eventually. The validity was determined through factor analysis method. The specific values for these factors were 3.29 and 2.4, respectively. It determined only 37.52% of the APS scores. It is noticeable that 21, 11, 6, 16 items were removed due to poor factor loading; the items declined to 23. The presented findings reported that this scale had good reliability among students. Cronbach's alpha was used to determine reliability; 0.60, 0.71 and 0.74, respectively; this implies the acceptable reliability of

this scale.

Results

The Pearson correlation test was used to evaluate the variables of personality traits, self-awareness and self-actualization dimensions. The data showed that extraversion, openness to experience, and agreeableness had a positive significant relationship with self-actualization and general self-actualization, with ranges from 0.14 to 0.52. A negative correlation was revealed between conscientiousness and openness to experience ($r=-0.13$, $P<0.0001$) although a positive significant relationship was shown between conscientiousness and self-reference ($P<0.0001$, $r=0.52$) and also between conscientiousness and general self-actualization ($r=0.41$, $P<0.0001$). A significant negative relationship was shown between neuroticism and self-reference ($P<0.0001$, $r=-0.34$) and between neuroticism and general self-actualization ($r=-0.21$, $P=0.001$). The private and public self-awareness dimensions had a positive relationship with openness to experience and general self-actualization, ranging from 0.15 to 0.45. Also, a significant negative relationship was presented between social anxiety and openness to experience ($r=-0.21$, $P=0.58$). A positive relationship existed between private self-awareness and self-reference ($P<0.0001$, $r=0.44$), but a negative relationship was shown between social anxiety and self-reference ($P<0.0001$, $r=-0.23$) (Table 1).

The multiple regression analysis methods were employed to identify the role of personality traits and self-awareness dimensions via predicting of general self-actualization and its dimensions. The VIF (Variance Inflation Factor) and the variable's tolerance were used to identify multicollinearity. VIF was >0.2 and tolerance was calculated in the range of 65 to 76%. These values were desirable for linear combination of the independent variables. The histogram and scatter plots were measured for normality status. The mean score obtained was 1.29 to 2.71. Indeed, the Kolmogorov-Smirnov Test examined

Table 1: The correlation matrix between the big five factor model, self-awareness dimensions, self-actualization dimensions and self-actualization

| Factors and dimensions | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|---------|--------|---------|--------|---------|--------|--------|---------|--------|---------|
| 1. Extraversion | - | | | | | | | | | |
| 2. openness to experience | 0.12 | - | | | | | | | | |
| 3. conscientiousness | 0.03 | 0.31** | - | | | | | | | |
| 4. agreeableness | 0.22** | 0.22** | 0.18** | - | | | | | | |
| 5. neuroticism | -0.19** | 0.001 | -0.34** | -0.02 | - | | | | | |
| 6. private self-awareness | 0.06 | 0.45** | 0.36** | 0.20** | -0.006 | - | | | | |
| 7. public self-awareness | 0.12 | 0.06 | -0.03 | 0.34** | 0.18** | 0.29** | - | | | |
| 8. social anxiety | -0.60** | -0.12 | -0.14* | -0.16* | 0.34** | -0.14* | -0.05 | - | | |
| 9. openness to experience (self-actualization) | 0.25** | 0.23** | -0.13* | 0.40** | 0.02 | 0.28** | 0.21** | -0.21** | - | |
| 10. self-reference | 0.14* | 0.33** | 0.52** | 0.18** | -0.34** | 0.44** | 0.04 | -0.23** | 0.35** | - |
| 11. general self actualization | 0.23** | 0.35** | 0.41** | 0.34** | -0.21* | 0.45** | 0.15* | -0.27** | 0.78** | -0.86** |

** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed)

the normality relationship. P-value ranges was >0.05. In this analysis, personality traits and self-awareness were considered as predicting variables and general self-actualization and its dimensions were regarded as independent variables separately. The results of regression analysis showed that agreeableness of personality traits ($P<0.0001$, $\beta=0.29$) and private self-awareness of self-awareness dimensions ($P=0.025$, $t=2.26$, $\beta=0.17$) predicted openness to experience positively. These variables scores determined 23% of the variance of openness to experience dimension ($P<0.0001$, $R^2=0.23$) (Table 2).

Table 2: Results of regression of openness to experience on the personality traits and self-awareness dimensions

| Predicting variables | β | t | P< |
|------------------------|---------|--------|--------|
| Extraversion | 0.13 | 1.83 | - |
| Openness to experience | 0.06 | 0.91 | - |
| Conscientiousness | 0.000 | -0.005 | - |
| Agreeableness | 0.29 | 4.3 | 0.0001 |
| Neuroticism | 0.09 | 1.26 | - |
| Private self-awareness | 0.17 | 2.26 | 0.025 |
| Public self-awareness | 0.01 | 0.18 | - |
| Social anxiety | -0.07 | -0.91 | - |

Conscientiousness ($P<0.0001$, $\beta=0.30$) and private self-awareness ($P<0.0001$, $\beta=0.29$) factors predicted self-reference dimension positively and neuroticism factor predicted self-reference negatively ($P<0.0001$, $\beta=-0.22$). Together, these variables scores identified 40% of the variance of self-reference dimension ($P<0.0001$, $R^2=0.40$) (Table 3).

Table 3: Results of regression of self-reference on the personality traits and self-awareness dimensions

| Predicting variables | β | t | P< |
|------------------------|---------|-------|-------|
| Extraversion | 0.05 | 0.70 | - |
| Openness to experience | 0.08 | 1.3 | - |
| Conscientiousness | 0.3 | 4.92 | 0.001 |
| Agreeableness | 0.03 | 0.53 | - |
| Neuroticism | -0.22 | -3.65 | 0.001 |
| Private self-awareness | 0.29 | 4.43 | 0.001 |
| Public self-awareness | -0.005 | -0.08 | - |
| Social anxiety | -0.02 | -0.31 | - |

Table 4 showed that conscientiousness of personality traits ($P=0.002$, $\beta=0.2$) and agreeableness of personality traits ($P=0.004$, $\beta=0.18$) and private self-awareness of self-awareness dimensions predicted the general self-actualization positively ($P<0.0001$, $\beta=0.28$). Overall, these variables' scores determined 36% of the variance of the general self-actualization ($P<0.0001$, $R^2=0.36$).

Discussion

The aim of this study was to examine the role of

Table 4: Results of regression of general self-actualization on the personality traits and self-awareness dimensions

| Predicting variables | β | t | P< |
|------------------------|---------|-------|-------|
| Extraversion | 0.10 | 1.56 | - |
| Openness to experience | 0.09 | 1.38 | - |
| Conscientiousness | 0.20 | 3.15 | 0.002 |
| Agreeableness | 0.18 | 2.95 | 0.004 |
| Neuroticism | -0.10 | 1.57- | - |
| Private self-awareness | 0.28 | 4.21 | 0.001 |
| Public self-awareness | 0.004 | 0.06 | - |
| Social anxiety | -0.05 | -0.75 | - |

personality traits and self-awareness in predicting general self-awareness with its dimensions (self-reference and openness to experience) among gifted students. These findings suggested a pattern of correlation between variables so that a positive relationship was reported between extraversion, openness to experience, and agreeableness factors with self-actualization dimensions (openness to experience, self-reference, and general self-actualization). The traits such as intimacy, venture, extraversion, openness to new ideas, friendly beauty, active imagination and flexibility (openness to experience), humility, altruism, sympathy (agreeableness) were associated with more self-actualization and aid anybody to reach actualization of potential abilities; the same result was shown in other previous studies.^{17,22} The current results were coordinated with many researchers such as Bochniak,⁵ Ryan & Deci,⁸ Chan & Joseph²³ based on a relationship between extraversion and self-actualization. Also, Hall and Hanson⁴ Boeree,⁶ and Ramanaiah²⁴ found a relationship between agreeableness and self-actualization; moreover, conscientiousness factor had a positive relationship with self-reference and general self-actualization dimensions, and there was a negative relationship with openness to experience dimension. Features such as perfectionism, order, meaningful, being responsible were necessary for self-actualization.^{22,25} These individuals had a strong tendency toward significant success and they had the motivation to maintain progress.²⁶ Conscientious individuals adhered to moral principles and individuals who were cautious in making decision hesitated before doing tasks, but self-actualized individuals were seeking diversity and new experiences. They had autonomous criteria for morality instead of conventionality.²⁷ Gifted individuals were spontaneous and had a high level of moral judgment; nevertheless, they were much concerned with justices.²⁸ Another result demonstrated that neuroticism had a negative relationship with general self-actualization. The features of neurotic individuals were emotional instability, maladjustment, tendency toward experiencing negative emotions such as fear, sadness, sin feeling, anger, and anxiety,²⁹ but according to Maslow's theory, self-actualized individuals were kind, calm, flexible and ready for acceptance of their faults. These persons had positive communications and followed individual development.⁸ The survey of

correlation pattern between self-awareness and self-actualization dimensions showed that private self-awareness had a positive correlation with both of self-actualization and general self-actualization dimensions; furthermore, public self-awareness had a positive relationship with openness to experience and general self-actualization. This finding described the general self-awareness of the person on himself/herself as a social individual and notified that social communications and external phenomenon are accompanied with greater self-actualization among the gifted students. This was reported in previous studies.^{30,31} Gifted individuals with high levels of self-awareness enhanced their mental experiences through more understanding of themselves, skills, and levels of challenges, thus promoting their self-actualization.¹² Openness to experience index in self-actualized individuals revealed that they were informed about feeling and openness to itself and others. Furthermore, they had a positive perception to life. These people tended to understand the old ideas through new methods,³² so they can be engaged in the developmental process within self-awareness to external events and accessed the new experiences. Another aspect of self-awareness dimensions was social anxiety that represented a significant negative relationship with self-actualization and general self-actualization dimensions according to Nezelek.³³ The self-actualized individuals needed more loneliness than the others.²² Self-actualized individuals were more autonomous due to susceptibility to loneliness and solitude. They had social interests; also, they were kind and had a tendency toward society. One with more social anxiety avoided confrontation to people and had difficulty avoiding its shame and embarrassment difficulty.³⁴ These traits were inconsistent with the characteristics of self-actualized individuals. Thus, increasing of social anxiety was associated with a decline in self-actualization. Self-actualization is a multi-faceted structure; an important feature of self-actualization is to actualize one's potentials. The other defining aspects of self-actualization are self-acceptance, authenticity, acceptance of others and spontaneity as well as a relationship with happiness and self-esteem.³⁵ The current findings demonstrated that agreeableness and private self-awareness factors predicted openness to experience dimensions (self-actualization) positively. Moreover, gifted students with more agreeableness and awareness to themselves, feeling as well as internal beliefs, openness to changes can more likely be self-motivated and respond through positive perception to themselves and situations. They can actualize their talents through openness to themselves, life and others. The agreeable person with more private self-awareness evaluated himself/herself as an object into event or experience and also observed the positive and negative effect that may affect the behaviors, attitudes, thoughts and interactions. Furthermore, this improved the new insights based on experiences through awareness about motivation and personality and also understanding about

how these factors impact judgments, decision, and interactions. It is evident that new perspective and information affected next situation.¹⁰ As regards, these results supported previous studies' results.³⁶ This study reported that conscientiousness and private self-actualization factors predicted self-reference positively, and also neuroticism predicted it negatively. In other words, people who had more self-reference tried to perform tasks correctly by focusing on their goals and responsibility to life and their activities. They had a good feeling about moralities and weren't instable against other judgments. They had a high level of self-esteem and feeling freedom when expressing their opinions and were resistant against social pressures contrary to the neurotic person who had many features like blushing, sadness, despair and anxiety.¹⁷ The people with lower neuroticism and high level of conscientiousness were more aware about their values and opinions, too.^{12, 16} The individuals with more self-reference were satisfied with thinking and acted based on their personality and individual values.¹⁷ Thus, the high level of private self-awareness, conscientiousness, and emotional stability predicted the increase self-reference among gifted students. This finding was consistent with many studies based on the relationship between conscientiousness and self-actualization.³⁷ This result approved the Maslow's theory based on lack of neuroticism in self-actualized individuals.²⁶ The multiple regression result showed that conscientiousness and agreeableness factors and private self-awareness dimension predicted general self-actualization positively. Those with less agreeableness had no universal view to problems; also, they didn't consider various aspects of other's thoughts. Students with lower conscientiousness could not focus on several goals in a task accomplishment and did not try to achieve their aims. Therefore, they did not believe in their abilities and did not try to actualize their abilities and talents. Many types of research have shown that private self-awareness was in accordance with more conscientiousness and agreeableness.^{12,16} Gifted students achieved a high level of talent via recognition of themselves and understanding situations and promoted the goals of their self-actualization.³⁶

Conclusion

It can be concluded that the parameters of openness to experience are associated with the features of the agreeable individuals and characteristics of self-reference are accompanied with conscientiousness. The general self-actualization that consisted of openness to experience and self-reference indices was also related to conscientiousness and agreeableness. Moreover, neuroticism factor had a negative relationship with general self-actualization; thus, this result confirmed Maslow's theory based on the negative role of neuroticism in self-actualization. On the other hand, private self-awareness was companioned with self-actualization and general

self-actualization dimensions. Our findings showed that a series of environmental and interpersonal factors such as personality traits, motivation, and self-awareness were effective in giftedness to talent process. Our research had a limitation. We selected our samples from an educational sector with low number of population. To generalize our results, we could select volunteers from all educational districts by random selection.

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References

- Gagne, F. Transforming Gifts into Talent: The DMGT as a Developmental Theory. *High Ability Studies* 2004; 15(2): 119-147.
- Gagne, F. Understanding the Complex Choreography of Talent Development through DMGT-Based Analysis: Chapter 4. From University Quebec a Montreal, Canada 2008.
- Pufal I & Struzik. Self-Actualization and Other Personality Dimensions as Predictors of Mental Health of Intellectually Gifted Students. *Roeper Review* 2010; 22: 43-45.
- Hall EG, Hansen J. Self-Actualizing Men and Women: A Comparison Study. *Roeper Review* 2010; 20(1): 22-27.
- Bochniak J. The Relationships between Extraversion, Self-Actualization, and Wilderness Solitude Attainment for Participants in a Wilderness Solo Experience. (Dissertation for the Degree of Master of Science in Recreation, State University of New York College at Cortland) 2007.
- Boeree C. Personality Theories: Abraham Maslow (1908-1970). Retrieved from <http://webspaceship.edu/cgboer/maslow.html>.
- Vitters J. Subjective Well-Being versus Self-Actualization: Using the Flow-Simplex to Promote a Conceptual Clarification of Subjective Quality of Life. *Social Indicators Research* 2003; 65: 299-33.
- Ryan RM & Deci EL. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudemonic Well-Being. *Annual Review of Psychology* 2001; 52: 141-166.
- Maddi SR. Personality Theories: a Comparative Analysis. California: Pacific Grove 1989.
- Janasz D, et al. Interpersonal Skills in Organizations: Journey into Self-awareness. *Journal of Education* 2008; 72(1997): 36-58.
- Morin A. Levels of Consciousness and Self-Awareness: A Comparison and Integration of Various Neurocognitive Views. *Consciousness and Cognition* 2005; (15): 358-371.
- Nysted L & Ljungberg A. Facets of Private and Public Self-Consciousness Construct and Discriminant Validity. *European Journal of Personality* 2002 ;(16): 143-159.
- Fenigstein A, Scheier M & Buss A. Public and Private Self-Consciousness: Assessment and Theory. *Journal of Consulting and Clinical Psychology*. 1975; 43(4): 522-527.
- Hensly PA. Global Giftedness: Families at the Heart of Gifted Development. *Conceptual Foundations* 2005; 15(2): 13-15.
- Goldberg LR. From ace to zombie: Some explorations in the language of personality. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in personality assessment*. Hillsdale, NJ: Erlbaum 1982; (1): 203-234.
- Realo A & Allik J. The Estonian Self-Consciousness Scale and Its Relation to the Five-Factor Model of Personality. *Journal of Personality Assessment* 2010; (70): 109-124.
- Lefrancois R, Leclerc G, Dube M, Herbert R & Gaulin P. The Development and Validation of a Self-Report Measure of Self-Actualization. *Social Behavior and Personality* 1997; 25(4): 353-336.
- Khormayi F. "Evaluation of personality model, motivational orientation and cognitive styles of learning". Ph.D. Thesis, Faculty of Education and Psychology, Shiraz University 2006 (Persian).
- Costa PT & McCrae RR. Professional Manual NEOPI-R and NEOFF-I. Psychological Assessment Resources, Inc 1992.
- Latifian M & Saif D. The effect of self-awareness on interpersonal disorders among students. *Journal of Humanities and Social Sciences, Shiraz University (special issue of Education)*, 2007; 26(3): 150- 137 (Persian).
- Avsec A & Bajec B. Validation of the Slovene Version of the Self-Consciousness Scale. *Horizons of Psychology* 2006; 15(1): 7-22.
- Mittleman W. Maslow's study of self-actualization: A reinterpretation. *Journal of Humanistic Psychology* 1991 ;(31): 114-135.
- Chan R & Joseph S. Dimensions of personality, domains of aspiration, and subjective well-being. *Personality and Individual Differences* 2000; (28): 347-354.
- Ramanaiah NV, Heerboth JR & Jinkerson DL. Personality and self-actualizing profiles of assertive people. *Journal of Personality Assessment* 1985; (49): 440-443.
- Roeper A. Self-Actualization and Interdependence in Gifted Children. *Conceptual Foundations* 1999; 31 (4): 7-10
- Hanley SJ & Abell SC. Maslow and relatedness:

- Creating an interpersonal model of Self-Actualization. *Journal of Humanistic Psychology* 2002 ;(42): 37-57.
- 27 Bradley RM. A Study of Self- Actualization of Gifted Children in Public High School Programs. (Dissertation for the Degree of Doctor of Theology, Holos University) 2009.
- 28 Sauder A. Exploring Adults Perception of Giftedness in Their Pursuit of Graduate Education. (Dissertation for the Degree of Master of Education, Brock University) 2009.
- 29 Costa PT & McCrae RR. *Personality in Adulthood: A Five Factor Theory Perspective*. London: The Gilford Press 2003.
- 30 Herbst R. The Relationship between Self-Actualization and Emotional Intelligence. (Dissertation for the Degree of Master Arts, University of South Africa) 2003.
- 31 Brown KW & Ryan RM. The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology* 2003; 84 (4): 822–848.
- 32 Tiller W & Alberta C. Introduction of the Concept of Multilevel Actualization: Dabrowski and Gifted Education: Beyond over Excitabilities. (Eighth International Congress of the Institute for Positive Disintegration in Human Development) 2008.
- 33 Nezelek JB. Day-to-Day Relationships between Self-Awareness, Daily Events, and Anxiety. *Journal of Personality* 2002; 70(2): 249-276.
- 34 Bogels SM & Lamer CTJ. The causal role of self-awareness in blushing-anxious, socially-anxious and social phobic individuals. *Behavior Research and Therapy* 2002; 40(12): 1367-1384.
- 35 Lorna J, Otway & Katherine B. Carnelley (2013) Exploring the Associations between Adult Attachment Security and Self-actualization and Self-transcendence, *Self and Identity* 2013; 12(2): 217-230, DOI: 10.1080/15298868.2012.667570.
- 36 Fahlman SH. Actualization of Giftedness: Effects of Perceptions in Gifted Adolescents. *Gifted Adolescents*. Retrieved November 21, 2000. Available from URL: <http://www.ecbiz111.inmotionhosting.com>.
- 37 Shaughnessy MF, Kang MH, Greene M, Misutova M, Suomala J & Siltala R. 16pf Personality Profile of Gifted Children: Preliminary Report of an International Study. *North American Journal of Psychology* 2004; 6(1): 51-54.