

The Relationship between Self-Esteem and Emotional Intelligence with Imposter Syndrome among Medical Students of Guilan and Heratsi Universities

Shohreh Ghorbanshirodi ^a

^a Department of psychology, Tonekabon Branch , Islamic Azad University, Tonekabon, Iran.

ABSTRACT

IP is a psychological disorder that a person attributes his/her success to chance or fate and doesn't believe in his/her success. The person, also, acts as an intelligent and deserving person. The present research studies the relationship between this syndrome with two variables-self-esteem and emotional intelligence components.

The purpose of this research was to study the relationship between self-esteem and emotional intelligence components with imposter syndrome among medical students. The statistical community of this research is all the medical students of Guilan university and all the Iranian medical students of Heratsi university of Yerevan(Armania) which 200 students out of 419 students in both universities were chosen by proportional stratified random sampling as the research sample group. Schutte's emotional intelligence scale, Coopersmith's self-esteem test and Clance's imposter phenomenon scale (CIPS) were used as research instruments.

Results showed that there was a negative significant correlation between self-esteem and imposter syndrome, also, there was a significant correlation between "appraisal and expression of emotion" and "utilization of emotion". But the difference between self-esteem and imposter syndrome correlation coefficients was not statistically significant. When studying the differences between "emotional intelligence components" and "imposter syndrome" correlation coefficients of Guilan's and Yerevan's students, a statistically significant difference in utilization of emotion component was found. When studying the differences between self-esteem" and "emotional intelligence" correlation coefficients of Guilan's and Yerevan's male and female students, a statistically significant difference in self-esteem was found.

In spite of the existence of success external instances, people with imposter syndrome are incapable of internalizing their successes; thus, an uncertain self-esteem is a characteristic of an impostor person. Hence, emotional intelligence control would be helpful for people with imposter syndrome.

KEY WORDS: Emotional intelligence, Self-esteem, Imposter syndrome, assessment.

1. INTRODUCTION

The imposter syndrome is known as a set of feeling guilty about success, lack of introjections of success, fear of evaluation, a feeling of unworthiness and a feeling of vocational and educational inefficiency (Clance&Imes,1978; Clance&O'Tool,1988; Young,2003). For the first time, Clance and Imes (1978) used the term of "Imposter phenomenon" and Harvey(1990; form Kats & Harvey,1995) and Kolligian and Sternberg(2000) presented it as a personality construct. In Kolligian's and Sternberg's(2000) opinion, "perceived fraudulence" is a scientifically better and more understandable term than "imposter". They suggested to categorize this mental fraudulence experience as a category in personality disorder or pervasive mental disorder for it's known not as a symptom but a "self-perception" or "self-referral ideation" with cognitive and emotional-affective components.

Some of the researches indicated that when imposters face a competitive situation, show two anxiety reactions: they become negligent and make up excuses for doing the given task or spend excessive energy doing it (Cromwell, Brown, Sanchez-Huceles& Adaire, 1990; Clance, Dingman, Reviere&Stober,1995; Thompson, Foreman&Martin,2000; Cowman&Ferrari,2006). If there's any success, the first group attribute it to luck and the second attribute it to their excessive diligence. Thereby, Gediman (2005) describes imposter or perceived fraudulence as a personality characteristic in which individuals think that their competence is not real. Therefore, this syndrome is a set of fear, doubt, worry and defective cycle of post-success anxiety which doesn't allow individuals to develop and benefit from all of their latent abilities(Holmes, Kertay, Adamson, Hulland &

*Corresponding Author: Shohreh Ghorbanshirodi, Department of psychology, Tonekabon Branch , Islamic Azad University, Tonekabon, Iran.

Clance,1993; Young,2003). Rothman(2000) and Piedmont(2002) state that success congregation is one the ways to increase self-esteem. But in contrast, there are individuals who don't internalize their successes and in fact deny them which leads to low self-esteem. Aside from weakening self-image and self-esteem, Imposter causes negative perfectionism (Thompson, Foreman & Martin,2000). Various researches show that successful individuals intentionally or unintentionally may strive to create some barriers to their goals, because they're scared of being recognized, privileged and responsible (Fried-Bachalter,1997; Cowman & Ferrari,2006&2008). Imposter syndrome may have relatively various impacts in different societies. Thus, in Lew et al.'s opinion, it's best that imposter is studied based on the certain culture of the society . Therefore, it shows the necessity of this research in Iranian society.

Gilligan(1982, from Reis,2002) alludes to gender differences in attachment and development domain, as in TAT , men make up violent stories for intimacy and attachment and are scared of success and intimacy, while women tell stories about their fear of success and they avoid success. In her researches regarding women's interpretations of success, Young (2003) relates it to "Blanche dubois syndrome" in which imposter women attribute their success to the "kindness of strangers". Robinson and Goodpaster (2000), Thompson(2004) and Kumar and Jagacinski (2006) showed in their researches that women are more exposed to imposter syndrome than men.

In some researches, failure avoidance behaviors such as lack of self-worth protection, self-handicapping, negligence, imposter fears and defensive pessimism are mentioned as symptoms of imposter syndrome (Dinnel, Hopkins &Thompson, 2004). In their studies on a group of male and female students, Kumar and Jagacinski (2006) concluded that imposter fears are related to achievement goals and imposters have a distinct attitudinal pattern to intelligence, capability and goal selection.

The etiology of imposter syndrome includes many factors such as: the connection link between family variables, personality variables, destructive beliefs and the unpleasant consequences of progress(Thompson,2004), family and child rearing method(Thompson,Davidson&Barber,1995; Leung&Kwan,1998; Ferrari&Olivette,2000; Thompson,2004; Want&Klietman,2006), attribution styles (Smith&Harris,2002; Lord,2004; Deaux,2005; Frieze, Whitley, Hanusa&McHugh,2009), gender differences(Mead,1949 form Clance&Imes,1978; McCobby,1963 form Clance&Imes,1978; Gilligan ,1982 form Reis,2006; Feried-Buchalter,1997; Reis,2002; Reis,2002; Young,2003; Richardson,2003; Sassen,2006; Ludwing,2006).

Vallerie Young (2003) discovered five psychological profile such as perfectionists, experts, chester fields, natural geniuses and rugged individuals. Studies show that imposter syndrome is positively correlated with anxiety(Clance&Imes,1978; Mathews&Clance,1985; Topping&Kimmel,1985; Thompson et al.,1998; Lauderdale et al.,2002; Chae et al.,2002; Lester&Moderki,2006; Okoth et al.,2007; Caselman&Self,2011).Chrisman et al.(1995) report a high correlation between depression and imposter fears and Ross et al.(2007)'s findings indicate that imposters may show two kinds of personality diorders: avoidance personality disorder and dependent personality disorder and found a positive correlation between imposter syndrome and a number of "self-defeating" personality disorders which may lead to inconsistencies in behavioral characteristics and life style.

An individual's feelings, thoughts and evaluations of his abilities in social, educational, familial and body image domains are called "self-esteem". William James (1980, form Bednar et al., 1989) states that self-esteem consists of two components: global self-esteem and specific self-esteem. Global self-esteem includes all the things that an individual attributes to himself, such as physical appearance, abilities and material belongings. Specific self-esteem includes all the things which an individual achieve through social relations during his life and they are exclusively his experiences which he doesn't share with anyone else. Overall, self-esteem can decrease or increase by the rate of feeling worthwhile, respectable, competent and internally satisfied (Franken, 2008).

Coopersmith(1967) describes "the values which a child receives from others", "child's experiences from his achievements", "child's definition of failure and success" and "child's coping methods with negative feedbacks or criticisms" as the main factors of forming self-esteem. Biabangard(2004) studied all kinds of children's and teenagers' self-esteem whithin social, educational, familial, body image and general self-esteem domains. Rosenberg (1979) divides self-esteem into "real self", "ideal self" and "public self".

French(1989; Wargo,1972 form Biabangard,2004) calls self-esteem as a cultural shield against anxiety and Stang (2005) confirms the reciprocal relationship between self-esteem and individual's image of his abilities. Self-esteem is an affective feeling of self acceptance and self-worthiness and it is different from self-confidence. Self-confidence is more related to Bandura's (1977, form Bednar et al.,1989) "self-efficacy". Franken (1998, form Biabangard ,2004) suggests "self-evaluation"(Swann,2006), "success in valued domains"(Heatheron & Polivy, 2004) and "social values" as the main sources of self-esteem. According to researches performed by Coopersmith (1967), he deduced that losing sense of control and producing a sense of dissatisfaction is one of the distinguished aspects of low self-esteem.

Studies show that there are some relationships between locus of control and self-esteem(Seif,2002; Epistein,2001; Brrant,1972 form Biabangard,2004), depression and self-esteem(Beck,1995 form Biabangard,2004), self-esteem and

creativity (Biabangard, 2004), individual and collective self-esteem (Lahtanen & Crocker, 1989 from Biabangard, 2004; Crocker, 1989 from Biabangard, 1382; Tajfel & Turner, 2000; Jennifer et al., 2001; Torki, 2002), social support and self-esteem (Kelly, 1995). According to a number of researches, it appears that there is a high negative correlation between low self-esteem and imposter syndrome (Esmail-khani, 2006; Imes, 1979; Topping & Kimmel, 1985; Chrisman et al., 1995; Thompson et al., 1998; Thompson et al., 2000; Sonnak & Towell, 2001; Ross & Krukowski, 2002; Cuzzarelli & Major, 2005; Want & Klietman, 2006). In contrast, a number of researches show that imposters may still have a positive global self-esteem, but because of having uncertain self-esteem and doubts about their capabilities, they are not able to internalize their achievements and therefore cannot utilize all of the educational and vocational achievements to improve their own self-esteem (Ferrari, 1999; Snyder & Higgins, 2000; Thompson, 2004). According to results of the research done by Pinar Erturgut and Ramazan Erturgut (2009), it was found out that academic self-esteem levels of students differ according to level of education of their parents, economic condition of their families and the number of the years in which they received education. Other findings show the existence of a reverse and significant relationship between academic self-esteems and stress levels of the students.

Mayer and Salovey (1999) suggest the emotional intelligence as a construct which consists of: the ability of correct perception, emotional expression and evaluation, distinction and generalization of feelings in order to facilitate thinking, the ability of understanding emotions and emotional information and the ability of regulating emotions in step with the elevation in rational, emotional and health improvement. Steve Heins (1998) adds the two aspects of "inherent" and "acquired" to this definition and thus infers that emotional intelligence includes cognition, perception, expression of emotion, emotional facilitation, understanding emotion, management and regulation of emotion in order to improve and develop emotional intelligence (Asakere, 2006) and Vizinger (1972) states that emotional intelligence is the application of emotions intelligently; it means applying the emotions intelligently in order to direct the behaviors to achieve better results (Akbar-zade, 2003). Golman (1996) mentions self-awareness, self-control, social-awareness, social skills and self-regulating as the emotional intelligence components and states that self-awareness is the basis of all the other components of the emotional intelligence. He believes that in order to excel in the life challenges, individuals should rear the emotional intelligence components in themselves. Gardner (1948) divides the emotional dimension of his multi-dimensional intelligence into two general components: "internal capabilities" and "interpersonal skills". In Bar-on (1997) opinion, emotional intelligence comprises a set of no cognitive capabilities, qualities and skills which influence an individual's ability to success when facing incidents and environmental stresses and includes components such as emotional self-awareness, self-assertiveness, self-regard, self-actualization, independence, interpersonal relationship, social responsibility, empathy, problem solving, reality testing, flexibility, stress tolerance, impulse control, happiness and optimism. Bar-on's (1997) intelligence is similar to Wechsler's (1930) and Sassen's (2006) definition of intelligence.

Researches relating to the emotional intelligence training which were performed on students with general and mental deficiency showed that social interaction abilities of these students were increased (Song, Huang, Peng & Law, 2010). In researches related to the experimental study of emotional intelligence and relationship skills performed on medical students, they found out that increasing the emotional intelligence has a positive impact on students' relationship skills (Fletcher et al., 2009). Carolyn MacCann, Gerard J. Fogarty, Moshe Zeidner and Richard D. Roberts (2010) stated that there was a significant relationship between coping styles and emotional intelligence with academic achievement.

Bash-ghereh and Mohammad-khani (2007) in their study regarding the relationship between emotional intelligence and coping styles with general health among students found a significant relationship between them.

Therefore according to different theories that each tries to describe the barriers in the way of achieving success and their relationship with different variables, this paper studies the relationship between self-esteem and emotional intelligence components with imposter syndrome among medical students of Guilan university and university of Heratsi of Yerevan (Armania). So, we are trying to answer these questions: Is there a relationship between self-esteem and emotional intelligence components with imposter syndrome? Is there a relationship between self-esteem and imposter syndrome among medical students of university of Guilan and Iranian students of Heratsi medical university significantly different? Is there a relationship between emotional intelligence components and imposter syndrome among medical students of university of Guilan and Iranian students of Heratsi medical university significantly different? Is there a relationship between self-esteem and imposter syndrome among students of both genders significantly different? Is there a relationship between emotional intelligence components and imposter syndrome among students of both genders significantly different?

2. METHOD

The statistical community of this research includes all the medical students of Guilan university (306) and all the medical students of Heratsi university in Yerevan(Armania) in 1388-1389(2009-2010) and sampling was performed via proportional stratified random sampling and according to Morgan & Krejcie's sample size table(1973, from Seif-Naraqi & Naderi,2004),sample size is 200 (146 from Guilan university and 54 from Heratsi university).

This is a correlational research and its purpose is to identify variables related to imposter syndrome and to present a clear sketch of the relationship between predictor variables with criterion variable and finally understanding complicated behavioral models.

Students were asked to categorize their condition by their responses on each scale of the questionnaire through self-reporting in a definite period time (12-15 minutes per hour, break),thus the intensity of their emotional intelligence, imposter and self-esteem could be measured in a certain period of time.

The following questionnaires were used for gathering required data:

1.The Schutte Self Report Emotional Intelligence Test (SSEIT) is a 33 item self-report measure of emotional intelligence developed by Schutte et al. (1998). Items of the test relate to the three aspects of EI: (1) appraisal and expression of emotion,(2) regulation of emotion,(3) utilization of emotion. This test has been applied in so many researches and has an acceptable validity. For instance Ciarrochi et al.(2000; from Azizi,1386) calculated the validity of the entire scale to be 0.84 and the calculated validity for subscales are as followed: "appraisal and expression of emotion": $\alpha=0.76$, "regulation of emotion" : $\alpha=0.66$, "utilization of emotion" : $\alpha=0.55$. In order to assess the reliability of the research instruments , Cronbach's α (alpha) coefficient was used which for the entire scale was calculated to be 0.73 and the calculated validity for subscales are as followed: "appraisal and expression of emotion": $\alpha=0.67$, "regulation of emotion" : $\alpha=0.63$, "utilization of emotion" : $\alpha=0.58$.

2."Coopersmith's self-esteem test" consists of 58 items: 50 self-esteem items, and 8 items that make up the lie scale .This scale has been used in so many researches including Shekar-shekan (1983), Zirani (1997), Abdollahi (1994), Pour-Ashouri (1998), Miller et al. (1975), Dweck (1978 from Azizi,2005) with a proper reliability and its Cronbach's α (alpha) is $\alpha=0.72$.

3."Clance's imposter phenomenon scale (CIPS)" is the best scale to measure imposter syndrome in a student sample which consists of 20 items. In order to compute the internal similarity of this scale, Cronbach's α (alpha) was used and the estimated reliability is $\alpha=0.81$.

In order to analyze the data, descriptive statistics (mean, standard deviation, frequency, frequency percentage) was used and in order to test the hypothesis, inferential statistics such as multiple regression (to relate multiple variables and determining the share of each of the predictor variables in predicting the criterion variable) and Pearson's correlation coefficient test(to study the relationship between variables) and Fischer's Z test (to study the significance of correlation coefficient of the two independent groups) was used. For this purpose, all the required calculations were performed by SPSS18 software.

3. Findings

Is there a relationship between self-esteem and emotional intelligence components with imposter syndrome?

Table 1 The matrix of the correlation between self-esteem, emotional intelligence components and imposter syndrome

	Self-esteem	Appraisal and expression of emotion	Regulation of emotion	Utilization of emotion	Imposter syndrome
Self-esteem	1	0.071	*0.18	-0.01	**-.542
Appraisal and expression of emotion	0.071	1	**0.75	**0.68	**0.175
Regulation of emotion	*0.18	**0.75	1	**0.67	0.061
Utilization of emotion	-0.01	**0.68	**0.67	1	**0.299
Imposter syndrome	**-.542	**0.175	0.061	**0.299	1

According to the above table, there's a correlational relationship between: self-esteem and regulation of emotion, self-esteem and imposter syndrome, appraisal and expression of emotion and regulation of emotion, appraisal and expression of emotion and utilization of emotion, appraisal and expression of emotion and imposter syndrome, regulation of emotion and utilization of emotion.

Table 2 Standard and nonstandard coefficient of imposter syndrome prediction via predictive variables

Model	F	Level of significance	Multiple correlation	Square of the multiple coefficient	Square of the modified correlation	Standard error of estimation	Durbin-Watson error
Simultaneous	27.247	0.0001	0.620	0.385	0.37	10.22	1.95

According to Durbin-Watson statistic ($d=0.62$), the assumption of the lack of correlation between errors is confirmed and regression was used. The validity of the model was also confirmed by $F=27.247$ in $p<0.0001$. In regard to the obtained correlation ($r=0.62$), it can be concluded that self-esteem and emotional intelligence components can explain 39% of the imposter syndrome variance.

Table 3 Standard and nonstandard coefficient of imposter syndrome prediction via predictive variables

Coefficients Predictive variables	Nonstandard coefficients			Standard coefficients	
	B	Standard error of estimation	Beta	t	Level of significance
Constant	61.65	6.84		9	0.0001
Self-esteem	-0.9	0.11	-0.521	-8.47	0.0001
Appraisal and expression of emotion	0.17	0.18	0.093	0.97	0.23
Regulation of emotion	0.23	0.18	0.125	-1.28	0.2
Utilization of emotion	0.74	0.21	0.314	3.59	0.0001

4. DISCUSSION

The results of this research show a negative significant correlation ($r=-0.542$) between self-esteem and imposter syndrome which represents a relationship between the two variables. That is to say any increase in self-esteem is accompanied by a decrease in imposter syndrome and vice versa. These findings support the results of the researches done by Esmail-khani (2006), Clance and Imes (1978), Clance and O’Toole(1988), Harvey and Kats(1995), Thompson et al.(1998), Ferrari(1999), Rothman(2000), Kolligian and Sternberg(2000), Sonnak and Towell (2001), Chae et al.(2002), Piedmont(2002), Ross and Krukowski (2002), Young (2003), Dinnel et al.(2004), Thompson et al.(2004), Cozzarelli and Major(2005), Want and Klietman (2006), Caselman et al.(2011), but do not support the results of researches done by Topping (1985) and Harvey(1995) which reported that there was no significant correlation between self-esteem and imposter syndrome and only 9% of imposter scores could be predicted by low self-esteem.

An individual with imposter syndrome attributes his success to luck and personal attractiveness and is not confident about his self-worthiness, and he doesn’t tend to maintain his achievements because of his uncertain self-esteem and his fear of being recognized and facing his real capabilities and feeling guilty (Rothman,2000; Piedmont,2002). According to Caselman’s(2003) researches, individuals with imposter syndrome, tend to self-criticism severely and are involved in a negative perfectionism; Therefore therapeutic approaches such as “cognitive therapy” and “gestalt therapy” can be useful for these kind of people. Also, since there is a strong relationship between low educational self-esteem and imposter syndrome(Dinnel et al.,2004), there’s a possibility that it causes the individuals to be uncertain regarding their values in the public eye and act differently in educational and competitive environments.

Among emotional intelligence components, a significantly positive correlation was found between “appraisal and expression of emotion” and “utilization of emotion” with imposter syndrome, but there was no significant correlation between regulation of emotion and imposter syndrome; meaning an increase in “appraisal and expression of emotion” and “utilization of emotion” can cause an increase in the likelihood of the vulnerability of an individual of the community under study to this syndrome. Emotional intelligence and skill can improve or change(Bar-on,2000); but if this improvement and change is in a negative direction, it may lead the individuals with higher intelligence and emotions to give more importance to others’ evaluations of them because of the lack of self-awareness towards their own emotions, lack of emotional control, lack of the recognition and comprehension of others’ feelings towards them and lack of understanding the prediction of emotional transition to others. This may lead the individuals to excessive concentration on causal factors of the problems like failures and successes and consequently underlies the imposter syndrome. On the other hand, imposters think that their cognitive and personal intelligence are different from each other (Holmes et al.,1993), therefore they may evaluate their inherent intelligence to be less than what others think and their emotional intelligence, which is developed in a positive direction and know it as the secret of their success, to be more than what others think. Gardner(1948) states that

social skills must be balanced with intellectual comprehension of an individual's feelings and needs and results from an individual's self-realization. Therefore utilization of these skills must be a result of high self-esteem, not the mastery of using what people think and creating an immediate appeal.

Regarding the correlation coefficients between self-esteem and imposter syndrome of Guilan students ($r=-0.7$) and Yerevan students ($r=-0.59$), no significant difference was found; thus this variable has a similar effect on both groups' imposter syndrome and this result supports Young's (2003) researches which indicate that individuals' beliefs towards success is influenced by culture of the society they live in. The imposter syndrome causes a reduction of self-esteem in eastern societies and a negative attitude towards success in western societies, thus it should be taken into consideration that the subjects of this research (Iranian students of Heratsi university of Yerevan in Armenia and students of Guilan university) have culturally so many things in common.

Since the correlation coefficients between 'utilization of emotion' and 'imposter syndrome' of these two groups are statistically significant (Guilan students $=-0.11$ and Yerevan students $=-0.53$), it can be concluded that despite having a relatively high emotional intelligence and because of not being accepted in the interior general medical test in Iran and being dispatched abroad to educate in medicine, their self-confidence was lessened and they didn't internalize their success and consequently the probability of being affected by imposter syndrome increases; but regarding Guilan students, the relationship between utilization of emotion and imposter syndrome is significantly negative; meaning students with a relatively low emotional intelligence, are more affected by imposter syndrome. Therefore Thompson's (2004) opinion regarding "the possible reasons of imposter syndrome appearance are: parents' perfectional child rearing practices and their irrational expectations of children without regard to their capabilities and parents' contradictive messages in regard to achievements without presenting any correct pattern", is confirmed. According to Mayer and Salovey (1997) model, one of the secondary skills of the appraisal and expression of emotion component is the ability to determine the verity or untruth of the expression of feelings. Thus there's a possibility that individuals who are stronger in this component, acted better in answering the questions and as a result, the imposter syndrome is better diagnosed in them. Other reasons for the difference between correlation coefficients of "utilization of emotion" and "imposter syndrome" are as follows: insufficient social support, poor relationship between students and professors, poor consultative relationship between university professors as a result of cultural differences, students' nostalgia and being away from family and finally being affected by emotional dysphoria.

Findings show that there is a significant difference between self-esteem and imposter syndrome among girls ($r=-0.49$) and boys ($r=-0.72$). The results of this research support findings of Sassen (2006) in regard to describing imposter according to gender, Clance and Imes (1985), Robnson and Goodpaster (2000), Kolligian and Sternberg (2000), Thompson (2004) and Kumar and Jagacinsk i (2006) in regard to "imposter incidents happens more in women than men", Whitley, Hanusa and McHugh (1982), Frieze and Lord (1997), Smith and Harris bond (2002), Deaux (2005) regarding different attributions towards success and failure according to gender, but these results doesn't show any alignment with the findings of Topping and Kimmel (1985) and Cozzarelli and Major (2005) regarding lack of any difference between imposter scores according gender.

In Franken's (2008) opinion, imposter women establish barriers so that they can justify their expected failure and Reis (2002) believes that girls struggle between their womanly characteristics on one hand, and achieving independence on the other hand, which cause self-esteem to have a less influence on imposter syndrome in women. Some other reasons regarding imposter syndrome in women are: underestimation of their own abilities by women in comparison with men (Sassen, 2006), the difference between women's and men's attitude towards women's socialization (Fried-Buchalter, 1997) and the conflict between girls' educational methods (rearing a sense of affiliation, attachment and fostering) and achieving high educational and vocational grades and as a result, rearing a sense of insecurity towards independence and self-determination in them (Clance & O'Toole, 1998). According to the results obtained from this research, it can be concluded that emotional intelligence components are relatively similar in both male and female. Fried-Bachalter (1978) and Vance (2002) state that one of the behavioral characteristics of imposters is that they avoid to opine in intera-personal relationships and elude others' appraisal and judgment in interpersonal relationships; thus, there's still this possibility that the individuals understudy avoid to give their correct and real opinion, therefore, more studies in this regard is needed.

Acknowledgements

The author gratefully acknowledges the support provided by the Islamic Azad University Tonekabon Branch for their kind support and cooperation during field visits and data collection.

REFERENCES

- Akbar-zade,N,(2003).Emotional intelligence , Salovay et al. Farabi publications, Feiz-el-Islam Press.
- Asakere, A(2006). The effectiveness of emotional intelligence training on the 3rd grade students' aggression in Khomeini-shahr. Master's dissertation, Psychology school, Azad University of Khorasgan,
- Bash-ghereh,R. & Mohammad-khani,S.(2007). The relationship between students' emotional intelligence and general health coping styles : A research about students' psychological and general health. *Research in psychological health* ,3(1),37-47.
- Biabangard,E.(2004). Methods of increasing self-esteem in children and adolescents. Tehran: Parent-teachers association, Vol 7.
- Esmail-khani,F.(2006). " Imposter Syndrome". Baztab publication.No.3.
- Seif,A.(2002). Educational psychology(Learning psychology and education).5th edition. Agah publication,p.363.
- Bar-on,R.(2004).The Bar-on emotional quotientinventory(EQ-I) rational description and summary of psychometric properties in geher(ED),measuring emotional intelligence : common ground and controversy (pp.115-145). NewYork.nova science.
- Beck,J.S.,(1995). Cognitive therapy:basics and beyond. NewYork:Guilford press.
- Bednar ,R.L., Wells,M.G.& Peterson,S.R.(1989). Self-esteem ;Paradoxes and innovations in clinical thinal theory and practice.Sex roles;37;847-859.Washington;APA.
- Caselman,T.D., & Self,P.A. & Self,A.L.(2011). Adolescence attributing to the imposter phenomenon. *Journal of adolescence*, From <http://www.openlearningcenter.com> ,In press.
- Chae ,J.H.,Piedmont,R.L.,Estadt ,B.K.,Wicks,R.J.(2002). Personological evaluation scale in a Korean sample. *Journal of personality assessment*,65(3),456-467.
- Chrisman ,S.M.,Pieper,W.A.,Clance,P.R.,Holland,C.L.&Glick-hughes,C.(1995).Validation of the Clance imposter phenomenon scale. *Journal of personality assessment*,65(3),456-467.
- Clance,P.R. & Imes,S.A.(1978).The imposter phenomenon in high achieving women: dynamics and therapeutic intervention. *Psychotherapy: Theory research and practice*,15(3).211-247.
- Clance,P.R. & O'Tool,M.A.(1988).The imposter phenomenon; An internal barrier to empowerment and achievement. *Women & Therapy*,6,51-64.
- Clance,P.R., Dingman,D., Reviere,S.L. & Stober,D.R.(1995).Imposter phenomenon in an interpersonal/social context: Origins and treatment. *Women & Therapy*, 16, 79-96.
- Coopersmith,S.(1967). The antecedents of self-esteem. San Francisco,CA:Freeman.
- Cowman ,S.E. & Ferrari,J.R.(2006). "Am I for real?",Predicting imposter tendencies from self-handicapping and affective components. *Social behavior and personality*,30.
- Cozzarelli,C. & Major,B.(2005).Exploring the validity of imposter phenomenon. *Journal of social and clinical psychology*,9,401-417.

- Cromwell,B., Brown,N.W., Sanchez-Huceles,J., & Adaire,F.L.(1990).The imposter phenomenon and personality characteristics high school students. *Journal of social behavior and personality* ,5,563-573.
- Deaux,K.(2005).From individual different categories analysis of a decades research on gender. *American psychologist*.39,105-116.
- Dinnel,D.L., Hopkins,J. &Thompson,T.(2004). The role of family environment variables in the development of failure-avoidant behaviors. From : <http://www.yahoo.com>.
- Dweck,C.(2006). Motivational processes affective learning. *American psychologist*,41,1040-1048.
- Epistein,S.(2001). The self-concept revisited or a theory of a theory. *American psychologist*,28,405-416.
- Erturgut, P. & Erturgut, R.(2009). Stress and academic self esteem in primary school children who applied to the hospital:A research in pediatric hospitals in Turkey, *Procedia Social and Behavioral Sciences* 2 (2010) 1200–1204, Available online at www.sciencedirect.com
- Ferrari,J.R. & Olivette,M.J.(2000). Parental authority influences on the development females dysfunctional procrastination. *Journal of research in personality*,7,495-502.
- Fletcher ,I.,Leadbetter,P.,Curran,A. &O’Sullivan,H.(2009). A pilot study assessing emotional intelligence training and communication skills with 3rd year medical students. *Patient education and counseling*,76 ,376-379.
- Franken,R.E.(2008). Human motivation. From : <http://www.onlinelibrarywiley.com>.
- Frieze,I.H., Whitley,B.E., Hanusa,B.H. & McHugh,M.C.(2009). Assessing the ovetical models for sex differences in causal attributions for success and failure. *Sex roles*,8,333-343.
- Gediman,H.K.(2005). Imposter, inauthenticity and feeling fraudulent. *Journal of the American Psychoanalytic Association*,33,911-935.
- Golman ,D.(1999). Working with emotional intelligence. London: Bloomsbury publishing.
- Harvey,J.C.(1981). The imposter phenomenon and achievement: A failure to internalize success. Doctoral dissertation, Temple University, Philadelphia.
- Harvey,J.C. & Kats,C.(1995). *If I’m so successful, why do I feel like a fake?*,New York: Random House.
- Heatherton,T.F. & Polivy,J.(2004). Development state self-esteem. *Journal of personality and social psychology*,60,895-910.
- Holmes,S.W., Kertay,L., Adamson,L.B., Hulland,C.L. & Clance,P.R.(1993).Measuring the imposter phenomenon: A comparison of Clance’s IP scale and Harvey’s IP scale. *Journal of personality assessment*,60(1),48-59.
- Imes,S.(1985). Issues for high achieving professional women or understanding the imposter phenomenon. From: <http://www.gsu.edu/www.aow/resoueces/ip-issues.com>.
- Jennifer,D.C. & Beverley,F.(2001). Self-esteem and perception of conveyed impressions. *Journal of personality and social psychology*,58(1),122-133.
- Kelly,G.(1995). *The psychology of personal construct*, New York Mastan.
- Kolligian,J. & Sternberg,R.J.(2000). Perceived fraudulance in young adults: Is there an imposter syndrome?*Journal of personality assessment*,56(2),308-326.

- Kumar ,S.& Jagacinski,C.M.(2006). Imposter have goals too: the imposter phenomenon and its relationship to achievement goal theory. *Personality and individual differences*,4,147-157.
- Lauderdale,E., Lamberd,L. & Waters,C.(2002). Are webbing transformed? High achieving imposter building collegiality on adult. From: <http://www.ahea.org/lauderdalepaper.html>.
- Lester,D. & Moderki,T.(2006). The imposter phenomenon in adolescents. *Psychological reports*,16,466.
- Leung,P.W.L. & Kwan,K.S.F.(1998). Parenting style, motivational orientation and self-perceived academic competence: A meditational model. *Merrill-Palmer quarterly*,44,1-19.
- Lew,A.S. , Allen,R. Papouchis & Ritzler,B.(2003). Achievement orientation and fear of success in Asian American college students. *Journal of clinical psychology*,54(1),97-108.
- Lord,C.G.(2004). *Social psychology*. London:Havcout brace college publishing.
- Ludwing,M.M.(2006).Women in the olympic: A sport psychology perspective coaching women. *Basketball*,3,30-32.
- Mathews,G. & Clance,P.R.(1985).Treatment of the imposter phenomenon in psychotherapy clients. *Psychotherapy in private practice*,3,71-81.
- MacCann, C., Fogarty, G.J., Zeidner, M. & Roberts, R.D.(2010). Coping mediates the relationship between emotional intelligence (EI) and academic achievement,*Contemporary Educational Psychology* 36 (2011) 60–70, journal homepage: www.elsevier.com/locate/cedpsych .
- Mayer ,J.D. & Salovay,P.(2008). Emotional intelligence. *American Psychological Association*,63(6)503-517.
- Okoth,A., Moderski,T. & Lester,D.(2007). Imposter feeling in disturbed adolescents. *Psychological reports*,75,15-38.
- Piedmont,R.L.(2002). Another look at fear of success; fear of failure and test anxiety: A motivational analysis using the five factor model. *Sex roles*,32(3-4),139-158.
- Reis,S.M.(2002). Internal barriers, personal issues and decision faced by gifted and talented females. *Gifted child today magazine*,3,68-79.
- Richardson,R.(2003). Imposter syndrome. From: <http://www.hoagiesgifted.org/imposter.htm>.
- Robinson,S.I. & Goodpaster,S.K.(2000). The effect of parental alcoholism on perception of control and imposter phenomenon. *Current psychology; Research & Reviews*, 10(1-2),113-119.
- Rosenberg,M.(1985). *Social and the adolescent self-image*. Princeton,NJ,Princeton University press.
- Ross,S.R. & Krukowski,R.A.(2002). The imposter phenomenon and maladaptive personality : type and trait characteristics . *Personality and individual differences*,34(3),477-484.
- Rothman,M.(2000). Fear of success among business students . *Psychological reports*,78(1-3),863-869.
- Sassen,G.(2006). Success anxiety in women: A constructivist interpretation of its source and its significance. *Harvard Educational Review*, 50,13-24.
- Schutte ,N.S., Malouff,J.M., Hall,E., Haggerty,D.J., Cooper,J.T., Golden,C.J. & Dornhim,L.(1998). Development and validation of a measure of emotional intelligence. *Personality and individual differences*,25,167-177.
- Smith,P.B. & Harrisbond,M.(200). *Social psychology across culture*. London:Prentice hall

- Snyder,C.R. & Higgins,R.L.(2000). Excuses and their effective role in negotiation of reality. *Psychological bulletin*,104,23-25.
- Song,L., Huang,G., Peng,K. & Law,K.(2010). The differential effects of general mental ability and emotional intelligence on academic performance and social interactions. *Intelligence*,38,137-148.
- Sonnak,C. &Towell,T.(2001). The imposter phenomenon in British University students; Relationship between self-esteem,mental health, parental rearing style and socioeconomic status. *Personality and individual differences*,31(6),868-874.
- Stang,I.D.(2005). Conformity ability and self-esteem representative new search in social psychology ,Vol 30,No.2.
- Sternberg ,J.A.(1989). Clinical intervention with women experiencing the imposter phenomenon. *Women and Therapy*,4(4),19-25.
- Swann,W.B.(2006). *Self-traps: The elusive quest for higher self-esteem*. New York: W.H.Freeman .
- Tajfel ,H.& Turner,J.C.(2000). *The social identity theory for intergroup behavior*. Chicago, Nelson-Hall,p.7-24.
- Thompson,T.(2004). Failure-avoidance parenting, the achievement environment of the home and strategies for reduction. *Learning and Instruction*,14(1),3-26.
- Thompson ,T.,Davidson,H. & Davidson,J.A.(1998). Attributional and effect responses of imposter to academic success and failure outcomes. *Personality and Differences*,25,381-396.
- Thompson,T., Foreman,P. & Martin,F.(2000). Imposter fears and perfectionistic concern over mistakes. *Personality and Differences*,29,629-647.
- Thompson,T.,Davidson,J.R. & Barber,J.G.(1995). Self-worth protection in achievement motivation : Performance effects and attribution behavior. *Journal of educational psychology*,87,598-610.
- Topping ,M.E.H. & Kimmel,E.B.(1985). The imposter phenomenon: feeling phony. *Academic psychology bulletin*,7,211-225.
- Torki,M.A.(2002). Achievement motivation in college women in an arab culture. *Psychological Reports*,56(1),267-271.
- Want,J. & Klietman,S.(2006). Imposter phenomenon and self-handicapping: Links with parenting styles and self-confidence. *Personality and Individual Differences*, 40(5),961-971.
- Young, V.(2003). The imposter syndrome: finding a name for the feelings. From: <http://www.impostersyndrome.com>.