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# The relationship between Eysenck personality characteristics and resiliency with attitude to toward suicide among female students

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#### **ABSTRACT**

Present study conducted to determine the relationship between the Eysenck Personality characteristics and resiliency with a look at the issue of suicide among girl students in Kermanshah. Performing the research, a sample size of 250 individuals selected among all secondary school students in Kermanshah through cluster sampling. Descriptive study was a correlative type, to analyze the data; resulted data was analyzed using Pearson correlation and regression analysis by the help of SPSS19 software. To gather data, the Eysenck Personality characteristics questionnaires, Connor and Davidson resiliency approach and attitude to committing suicide used. Results showed that there was a positive, significant correlation between personality traits psychotic mental attitudes, and attitude to committing suicide, but there was a negative correlation between extroversion and attitude to committing suicide. In addition, results indicated that there was a negative correlation between resiliency and attitude to committing suicide. According to the results, it could be conclude that the character of a structure associated to suicide.

Key words: Personality characteristics, Eysenck, Resiliency, Suicide

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# 1. INTRODUCTION

orld statistics show that suicide has increased in recent decade, its age pattern is changing (Health ministry, cure and medical instruction). Suicide is one of the main ten reasons for death in most country around the world (1). Within all age groups, suicide is the eighth reasons for mortality in the world, but reported as the third reason for mortality among 15-24 age groups after accident and murder, and success suicide rate in men is three times more than in women, but suicide committing in women is more than in men. In Hoyert report, successful suicide in men is four times more than in women (2). In general, the reasons of committing suicide include: biological reasons where the problem results from chemical balance, psychological agents that emphasizes on understanding suicide, inter-psychic and inter personal active definitions, behavioral and cognitive approaches to describe suicide behavior and sociological reasons that relate to the effect of shared social groups on suicide (3). So one of the reasons related to suicide is individual's personality characteristics. Eysenk personality model is one of explanations offered in personality and suicide background. According to Eysenk model, three dimensions of personality are extroversion against introversion, neuroticism

against emotional persistence and psychotic against impulse control. Extroverts are explained as being sociable, interested in going to party, having many friends, need other people for talking, and lack of interest in studying. Neuroticism explained by Eysenkc as a weak connivance against tension (for example being more sensitive against pain) or an attitude to organized behavior collapse in opposition or disappointing situations. Nueropsychosists distinguished as stressed, depressed, irrational, and unstable. They may think they are not valuable and feel guilty (4). They show much more emotional reactions against trivial disappointment, get angry easily, are excited suddenly and are more depressed than other people are. However, psychosis individuals are egocentric, aggressive, inactive, impulsive, unempathy and do not notice other's requests. They can also be cruel, adversary and they may be inattentive and apathetic to other's requests and senses and may have criminal attitudes (4). Personality characteristics relate to suicide according to search and theory (5). Different researches showed that characteristic disorders are one of the most important factors to predict suicide (6). Shakeri et al, showed that individuals who do suicide in compare with control group individuals had more personality characteristics such as introversion, neuropsychotic and

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psychotic and experienced more stressful events before committing suicide, Based on the cognition, they had higher levels of mental stress due to life stresses (7). Many of researchers relate suicide to mood disorders (8). That relates to some personality characteristics and because personality characteristics are rather stable, they can be important in predicting the probability of person suicide thought (9). Most researches that did on this subject showed that neuropsychosis is probably the bold qualification that intervenes in creating a range of attitude that relate to suicide (10, 11). Duberstein et al, study the relationship between personality characteristics and suicide behavior by means of a five dimensions model and know that psychotic agent has positive correlation and extroversion agent has negative correlation with suicide, and patients who have suicide attitude in inclination get high grade; however, researches did not find any relation between inclination and suicide (12). Velting showed that psychoneurosis plays as a vulnerability agent for tendency to suicide, this search investigation showed that relationship between personality agents and suicide are different in two sexes. In other words, there are positive correlation between psychoneurosis and suicide attitude in women and positive correlation between conscientiously and suicide attitude in men (11). Chioqueta and Stiles study on students in university showed that there is a positive relationship between suicide attitude and psychoneurosis (10). In a study on 200 students in Tabriz University Medical Science, Beirami et al, find that suicide has positive and significant correlation with psychoneurosis agent and has negative correlation with extroversion agent and inclination (13). Another personality constructs that probably relates to suicide is resiliency, resiliency as one of the personality constructs plays a main and supportive role in social damages and our attitude. Resiliency is defined as human adaption ability in confront with calamity or life pressure, to prevail or become strengthen by those experience. This characteristic is supported by person's internal ability and social skills and reaction to the environment, and appears as a positive characteristic (14). Resiliency makes people use their capacities in difficult and hazardous situations to become successful and promote their situation, and use this challenges and experiments as an opportunity to raise their ability and finish them honorably (15). According to Fribog et al, resilience persons have more flexibility in front of traumatic situation and support themselves against these situations (16). Many agents such as genetic, psychological, family, society, environment and social effects that probably they are in interaction with together, have arole in resiliency (17). Vendi Middle Miss presented a research called Using Resiliency Based on Multi Setting Approaches and a Process Orientation to compare these approaches in preventing programs against social trauma (18). Results showed that it was effective in preparing babies to confront social trauma and the possible dangers throughout their lives. As mentioned before, previous researches pointed the role of characteristic in suicide, but these searches followed five agents patterns (Neo) and all of them focus on suicide behavior. However, this search introduces three new points that include use of Eysenk model, measurement of attitude to committing

suicide and study resiliency that its relation with suicide that has never been studied. Therefore, this search did to show relationship between personality characteristics and Eysenk model and resiliency with attitude to committing suicide within girl students.

# 2. MATERIALS AND METHODS

This search is a descriptive study of correlative type. Statistical samples of the study include all Kermanshah city high school girl students where 250 individuals selected through multi-stage cluster sampling. Selection criterion was studying in Kermanshah city governmental schools. In addition, tests should not be condition. To control some parameters such as cultural and social problems, students selected as samples that have been living in Kermanshah for recent ten years.

## 2.1. Study Equipment

Reconsider model of Eysenk personality questionnaire for teens (EQP-R): this questionnaire ID used to measure the psychoneurosis characteristic dimensions (emotional constancy, inconstantly) extroversion (extroversion-introversion) and psychotic among 16-17 year-old range. In addition to pointed dimensions, this questionnaire has a scale to measure lie and covered answer. Reconsider model of Eysenk personality questionnaire has 106 articles that include 90 Eysenk personality questionnaire articles, 10 new P scale article and 6 more articles that measure the addiction and being criminal. This questionnaire answers with yes and no. In Iran Kaviani et al, estimated the reliability coefficients of this reconsidered questionnaire model making use of retest method for addiction indexes of addiction 0.86, crime 0.88, psychoneurosis 0.89 and psychotic 0.72. Reliability coefficients reported by the main authors were between minimum 0.76 for psychotic index and maximum 0.90 for extroversion index (19). Mohammadzade studied the scales reliability coefficient of reconsider questionnaire model in Iran. Reliability coefficients of this test were 0.70 for addiction indexes, being criminal 0.68, extroversion 0.84, lay measure 0.73, psychoneurosis 0.73 and psychotic 0.75. This search uses Koronbakh α coefficient of 0.79 for this questionnaire (20).

# 2.2. Conner-Davidson resiliency scale (CDISC)

This scale includes 25 questions and have 5 grade Likert range from 0 to 4 meaning never, seldom, sometimes, most of the time and always, respectively. This scale was made by Conner-Davidson to measure the confront ability against pressure and threat (21). These scale makers believe that this questionnaire can separate the resilient and un-resilient individuals in clinical and un-clinical groups and used in clinical and research situation. In this scale, minimum grade for resiliency test is zero and maximum is 100. Internal parallelism, retest reliability and convergent and divergent reliability for this scale reported adequate and analysis results of discovery detection certified the existence of 5 agents: sufficiency, personal stability, trusts to person-

al instincts, tolerate negative emotions, positive accept of emotions, tolerate negative emotions and safe term, halter and idealism for resiliency scale. As reliability of these scales, do not certify differently just resiliency quantitative grade for research goals considered reliable (21). Reliability of resiliency in Persian model in preparatory studies of normal and patient samples surveyed and certified (22). In Iran, Mohammadi studied this scale. In the study by Samani et al, Koronbakh  $\alpha$  coefficient obtained as 0.87 for resiliency for this test (23). In this research, Koronbakh  $\alpha$  coefficient was 0.83 for this questionnaire.

# 2.3. Questionnaire of committing suicide

This questionnaire selected among existing questionnaire in consulting police center; seven questions that could evaluate attitude to committing suicide selected. In dead, this questionnaire was a seven question 5 Likerty type (quite agree, no idea, disagree, quite disagree). Koronbakh  $\alpha$  coefficient of this questionnaire was 0.77 for the research.

### 3. RESULTS AND DISCUSSION

As shown in Table 1, mean variables of psychoneurosis, psychotic and extroversion was 12.88 (standard deviation 4.62), 4.69 (standard deviation 2.34), 15.24 (standard deviation 4.78), respectively, and variables mean of attitude to committing suicide was 2.7 (standard deviation 1.29) and resiliency mean equaled 55 (standard deviation 13.52). Table 1 shows mean standard deviation and other descriptive information of research variables.

Table 1. Mean and standard deviation of research variables

|      | STANDARD  | MEAN | POSSIBLE | MAXIMUM | POSSIBLE | MINIMUM | VARIABLE   |                |
|------|-----------|------|----------|---------|----------|---------|------------|----------------|
|      | DEVIATION |      | MAXIMUM  |         | MINI-    |         |            |                |
|      |           |      |          |         | MUM      |         |            |                |
| 4/62 | 12/88     | 20   | 19       | 0       | 1        | psych   | oneurosis  | PERSO          |
| 2/34 | 4/69      | 16   | 12       | 0       | 0        | psych   | otic       | PERSONALITY CI |
| 4/78 | 15/24     | 24   | 33       | 0       | 4        | extro   | version    | CHARACTERIS-   |
|      | 1/29      | 2/70 | 35       | 6       | 1        | 0       | ATTITUDE   | TO SUICIDE     |
|      | 13/52     | 55   | 100      | 92      | 0        | 19      | RESILIENCY | 1              |

To investigate the relation of Eysenk personality characteristic and resiliency with attitude to committing suicide, Pearson correlation used. Results in Table 2 showed, correlation coefficient is 0.26 between psychoneurosis personality characteristic and attitude to committing suicide significant. Research results, also, showed that correlation coefficient is 0.31 for psychotic personality characteristic and attitude to committing suicide and between extroversion trait and attitude to committing suicide correlation coefficient is 0.22. Results show that between resiliency and attitude of committing suicide correlation coefficient is

0.16.

Table 2. Correlation matrix between attitude of committing suicide with Eysenk personality characteristic and resiliency

| Resilienc<br>y | extroversio<br>n | psychoti<br>c | psychoneuro<br>sis | Statistic<br>index | Attitude to social trauma |
|----------------|------------------|---------------|--------------------|--------------------|---------------------------|
| -0/16          | -0/22            | 0/31          | 0/26               | Significant        | Attitude to suicide       |
| 0/01           | 0/001            | 0/001         | 0/001              | corelation         |                           |

To predict the attitude to committing suicide regression, step-by-step analysis was used (Table 3). Predicting attitude to committing suicide regression model done in two stages. In the first stage, model with f=2.24 can predict the 10% criterion variance. In this stage psychotic added to the equation and can predict the criterion variable with 31%  $\beta$  coefficient. However, in the second stage, model shows that predict variables can predict the 19% of criterion variable. In the second stage, psychotic with 0.39 coefficients can predict the criterion variable (attitude of committing suicide).

Table 3. Summary of regression analysis for predicting attitude of committing suicide by Eysnk characteristics model and resiliency

|                      |       |      |       | contency | Juci ana i               | terratica in       | charac |       |      |                       |
|----------------------|-------|------|-------|----------|--------------------------|--------------------|--------|-------|------|-----------------------|
| Criteria<br>variable | stage | R    | $R^2$ | F        | Signifi<br>cant<br>level | Predict<br>vaiable | В      | β     | t    | Significa<br>nt level |
|                      | 1     | 0/31 | 0/10  | 27/24    | 0/001                    | psycho<br>tic      | 0/17   | 0/31  | 5/22 | 0/001                 |
| Att                  | 2     | 0/44 | 0/19  | 29/71    | 0/001                    | psycho<br>tic      | 0/21   | 0/39  | 6/60 | 0/001                 |
| Attitude to suicide  |       |      |       |          |                          | extrov<br>ersion   | -0/08  | -0/31 | 5/38 | 0/001                 |

This research aimed to determinate of relation Eysnk personality characteristics model and resiliency with attitude to committing suicide within girls students. Search results show that there is positive correlation between psychoneurosis and psychotic with attitude to committing suicide and there is negative correlation between extroversion and resiliency with attitude of committing suicide. This means the more a person is psychoneurosis or psychotic, the higher his or her attitude of committing suicide is, but if extroversion and resiliency is more in a person, his or her attitude of committing suicide is less. Therefore, results of present study coordinates with other research (6, 7, 10, 12, 13). Indeed many studies suppose personality as a suicide threaten agents, many research know personality characteristics such as psychoneurosis as suicide agents (3, 12, 24-27). Indeed the research results coordinate with researches mentioned. Noticing that main characteristic of psychotic person is that they are more capable of depression; one can conclude that they have more sense of being guilty. According to researches and theories, depressed individuals are more capable of committing suicide as these individuals accept the negative belief and inefficient attitudes. As the result, their idea about suicide is positive, also, in relation with extroversion, it should be mention that extroversion individuals according to their characteristic are more interested in life, gain more satisfaction from their lives and are more jubilation. Therefore, they do not have positive theories and thoughts about suicide and they have a negative idea about suicide and according to relationship and social groups where they are members, they are less depressed. They have negative attitude toward suicide. Psychotic persons, who their main characteristic is not having unanimity with other individuals, have less social relationships and don't notice other individuals desires, this personality characteristic can be a very important factor in creating committing suicide attitude, because these individuals see the world considering their inactive feelings and explain events with them. In another section, research results show that there is negative correlation between resiliency and suicide. It means that the more the more the resiliency is, the less his or her attitude of committing suicide is, According to Friborg et al. (16). Resilience individuals have more flexibility against threatening situations and support themselves against these situations. Indeed high resiliency strengthens individuals against stress and life problems and individuals become more hopeful in life. Individuals with high resiliency have positive attitude to solve their problems, so instead of becoming hope-

# **REFERENCES**

- 1. Barrero SAP. Preventing suicide: a resource for the family. Annals of general psychiatry. 2008;7(1):1.
- 2. Hoyert DL, Heron MP, Murphy SL, Kung H-C. Deaths: final data for 2003. National vital statistics reports. 2006;54(13):1-120
- 3. Ashoori A, Habibi Asgarabad M, Torkman Malayeri M, Javan Esma'li A. Relationship between suicidal ideation and personality in substance abusers. Journal of Behavioral Sciences. 2009;3(3):249-55.
- 4. Eysenck HJ. Dimensions of personality: Springer; 1991.
- 5. Yen S, Pagano ME, Shea MT, Grilo CM, Gunderson JG, Skodol AE, et al. Recent life events preceding suicide attempts in a personality disorder sample: findings from the collaborative longitudinal personality disorders study. Journal of consulting and clinical psychology. 2005;73(1):99-105.
- 6. Grucza RA, Przybeck TR, Cloninger CR. Personality as a mediator of demographic risk factors for suicide attempts in a community sample. Comprehensive psychiatry. 2005;46(3):214-22.
- 7. Shakeri J, Parvizifard AA, Sadeghi K, Moradi R. Personality traits, stress, coping and religious attitudes among individuals attempting suicide. Iranian Journal of psychiatry and clinical psychology. 2006;12(3):244-50.
- 8. Sher L, Oquendo MA, Mann JJ. Risk of suicide in mood disorders. Clinical Neuroscience Research. 2001;1(5):337-44.
- 9. Kerby DS. CART analysis with unit-weighted regression to predict suicidal ideation from Big Five traits. Personality and

less, they think to find a solution and their attitudes to committing suicide is negative. Perception of agents and reasons causing social toruma results in objective prevention, cognizance of cure and pursuit.

# 4. CONCLUSION

Present study tried to achieve this objective. Therefore, it is emphasizing that in future studies role of personality characteristics to attitude of addiction and alcohol, quarrel and other social trauma should be notice. In the end, it should be mention that according to sample size research, results could not generalized to other societies.

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### **AUTHORS CONTRIBUTION**

This work was carried out in collaboration between all authors.

#### **CONFLICT OF INTEREST**

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Individual Differences. 2003;35(2):249-61.

- 10. Chioqueta AP, Stiles TC. Personality traits and the development of depression, hopelessness, and suicide ideation. Personality and Individual Differences. 2005;38(6):1283-91.
- 11. Velting DM. Suicidal ideation and the five-factor model of personality. Personality and Individual Differences. 1999;27(5):943-52.
- 12. Duberstein PR, Conwell Y, Seidlitz L, Denning DG, Cox C, Caine ED. Personality traits and suicidal behavior and ideation in depressed inpatients 50 years of age and older. Journals of Gerontology Series B. 2000;55(1):P18-P26.
- 13. Bairami M, Eghbali A, Gholizadeh H. Interaction between Personality Factors and Depression Symptoms, Hopelessness and Suicidal Ideation among Students. Medical Journal of Tabriz University of Medical Sciences & Health Services. 2012;34(1).
- 14. Diener E. Well-being for public policy: Oxford University Press: 2009
- 15. Garbowski MA. Transformational leadership and the dispositional effects of hope, optimism, and resilience on governmental leaders: Regent University; 2010.
- 16. Friborg O, Barlaug D, Martinussen M, Rosenvinge JH, Hjemdal O. Resilience in relation to personality and intelligence. International journal of methods in psychiatric research. 2005;14(1):29-42.
- 17. Norris FH, Stevens SP, Pfefferbaum B, Wyche KF, Pfefferbaum RL. Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. American journal of community psychology. 2008;41(1-2):127-50.
- 18. Middlemiss W. Prevention and intervention: Using resilien-

cy-based multi-setting approaches and a process-orientation. Child and Adolescent Social Work Journal. 2005;22(1):85-103.

- 19. Kaviani H, Pournasseh M, Mousavi A. Standardization and validation of the revised Eysenck personality questionnaire in the Iranian population. Iranian Journal of psychiatry and clinical psychology. 2005;11(3):304-11.
- 20. MOHAMMADZADEH A, Borjali A. SCHIZOTYPAL TRAIT QUESTIONNAIRE (STQ) VERSUS EYSENCK PERSONALITY QUESTIONNAIRE (EPQ): DIVERGENCE AND CONVERGENCE BETWEEN TWO PERSPECTIVES IN PSYCHOSIS. ADVANCES IN COGNITIVE SCIENCE. 2008.
- 21. Connor KM, Davidson JR. Development of a new resilience scale: The Connor Davidson resilience scale (CD RISC). Depression and anxiety. 2003;18(2):76-82.
- 22. Besharat M. Resilience, vulnerability, and mental health. Journal of psychological Science. 2008.
- 23. Samani S, Jokar B, Sahragard N. Effects of resilience on mental health and life satisfaction. Iranian Journal of psychiatry and clinical psychology. 2007;13(3):290-5.
- 24. Renaud J, Berlim MT, McGirr A, Tousignant M, Turecki G.

Current psychiatric morbidity, aggression/impulsivity, and personality dimensions in child and adolescent suicide: a case-control study. Journal of Affective Disorders. 2008;105(1):221-8.

- 25. Gladstone GL, Parker GB, Mitchell PB, Malhi GS, Wilhelm K, Austin M-P. Implications of childhood trauma for depressed women: an analysis of pathways from childhood sexual abuse to deliberate self-harm and revictimization. American Journal of Psychiatry. 2004;161(8):1417-25.
- 26. Fergusson DM, Beautrais AL, Horwood LJ. Vulnerability and resiliency to suicidal behaviours in young people. Psychological medicine. 2003;33(1):61-73.
- 27. Useda JD, Duberstein PR, Conner KR, Conwell Y. Personality and attempted suicide in depressed adults 50 years of age and older: a facet level analysis. Comprehensive psychiatry. 2004;45(5):353-61.