

Development of Internally and Externally Controlled Responsibility Scale: Validity, Reliability and Analysis¹

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Abstract: In this study, Internally and Externally Controlled Responsibility Scale (IECRS) is presented. IECRS is the scale which is developed for Turkish society. Outcomes of IECRS' reliability and validity are presented in this tentative study. Reliability coefficient of IECRS calculated with Cronbach Alpha is found as 0,67. The correlation between Locus of Control and IECRS is observed as 0,67. Availability of IECRS on which further studies will be done is discussed and also some suggestions are put forward in present study.

Key words: Internally Controlled · Externally Controlled · Responsibility

INTRODUCTION

The purposes of Internally and Externally Controlled Responsibility Scale's development (IECRS) are to determine from where the individual takes the power of behaving responsible in social circumstances, whether the individual uses internal audit mechanism or external audit mechanism in taking responsibility and also the relation between responsibility and audit focus. In order to answer these uncertainties and the question of which causes irresponsible behavior whether being internal audit or external audit, a responsibility scale which is also questioning the audit focus is improved.

The concept, responsibility, is generally explained with itself in the dictionary as "the individual's accepting the results of any event in his behaviors or in his own authority" [1]. Chamberlin [2], defines the responsibility as behaving in responsible and the concept, responsible individual, as the people who can assure his/her own responsibilities. While discussing on the responsibility, it means the individuals' own behaviors or the events in his/her control area. When told the events within one's control area, not only does his own being contain responsibility values, but also his relationships and the individual's environment [3]. The responsibility in philosophy is defined as the situation of efficient people, the moral subject, who can undertake the results of his own actions done with a full mind and freedom [4]. As the

definition of morality (moral, ethic) Bolay [5] defines the morality as one's consciousness and power of taking the responsibility of outcomes of every which has done voluntarily.

In psychology literature, responsibility is also described in a very different, way unique. For example, Yalom [6] says the individual having self responsibility is respectful to both himself and others. That person does his own duties. He does his responsibilities on his own and doesn't be a burden on others vaguely. He is conscious of his ego worth and he blames merely himself for his own senses, ideas and behaviors. The responsible individual is a person who has proportional things about what he expected from life in his hands and who doesn't take anything that he hasn't deserved, is a hardworking people, a suitable parent and a good neighbor. According to the founder of Reliability therapy, Glasser [7] one of whose theory's fundamentals is responsibility, responsibility means 'the ability of meeting one's own needs without depriving of the others' own needs'. And this concept is also used as a key concept on describing the mental health situations. The description of psychiatric illness without its biological causes is useless. An opening like that is put forward 'The individual prefers loneliness and sadness because he could not face with realities and get the responsibility of participation. And so that he seeks psychiatric disorders in order to get rid of them.

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When the definitions are analyzed, the most obvious difference seen is that some scientists analyzed the concept 'social responsibility' while the others were emphasizing the concept 'individual responsibility' by using the features of individual responsible. For example, Nelson and Low [8], who emphasize this difference clearly, dealt with responsibility as a concept and were tried to define the concept under the name of individual responsibility. Individual responsibility means taking control of his own responsibilities, being responsible for his acts and congratulating only himself not others when he accomplishes something and on the other hand blaming only himself for his failures. Individual responsibility is the desire of determining the aim of life and the act of undertaking all responsibilities in order to reach his aims. So the individual blames only himself not others for his unsuccessful acts in reaching his aims [9].

The relationships among control focus, taking responsibility, burdening responsibility are generally tested by searching a relation as the results of being given of the advanced scales, responsibility scales and control focus scales. It is observed that many people don't use self-control and supervisory mechanisms too much in subjects such as deciding something, using the will on deciding period, defining present alternatives and choosing one of them, applying it and pursuing that; taking the responsibility of the pursued action consciously. External control based people have much more in efficiencies in responsibility matter [10]. Fitzpatrick and others [11] state that the individual lack of responsibility sense have much more character disorders, being tighter, high anxiety levels, having hostile behaviors and complex minds. Phares [12] searched the relationship between the control focus and responsibility and revealed the result that internally controlled women and men compared to externally controlled women and men have much more responsibility and they struggle with the problems which they meet well. Chebat [13] implemented Rotter's Supervisory Focus and Social Responsibility Scale of Berkowitz and Lutterman [14] in a study done on adolescents. At the end of the study, people getting average scores from Supervisory focus Scale and internally controlled people had the highest scores from Social Responsibility Scales. Kumchy and Saver [15], in their study done on guilty juveniles, revealed that guilty juveniles are externally controlled, have the least scores from responsibility scale and these people also have very low success motivation levels.

The outcomes of Golzar's [9] master study titled as 'Development of Responsibility Scale for Primary Fifth Grade Students and The Assessment of Responsibility Levels According to Gender, Locus of Control and Academic success are like that: Locus of Control Scale and an Individual Knowledge Form as accompaniment to the responsibility scale developed by the researcher were given to 207 Primary Fifth Grade students. At the end of the survey, it was reported that female students' mean scores which were taken from the Responsibility Scale are higher than male students' scores, the students taking high mean scores from the Responsibility Scale were found as being internally controlled from the Locus of Control Scale and also the students having higher academic successes took higher scores from the Responsibility Scale.

Researches done both domestically and outside show that exhibiting the responsible behaviors differentiates according to internal or external control focus.

Aim: In the present study, it is aimed to describe Internally and Externally Controlled Responsibility Scale (IECRS).

METHODS

In this section, samples, measurement tools and data analyses were emphasized.

Samples: In this study, reliability and validity studies on IECRS' post-form were applied over 337 eight grade students of Erzincan 75. Year Primary School, Central Primary School, Fatih Primary School.

Tools: In this present study, Internally and Externally Controlled Responsibility Scale (IECRS) was introduced and as IECRS' criteria validity Rotter [16] Locus of Control Scale was used. At below, IECRS' was described briefly.

Internally and Externally Controlled Responsibility Scale (IECRS): In this scale different life styles were given. It was demanded from the individuals to state behavior kind which was shown against these life styles.

This scale was developed for the aim of determining from where the individual takes power of behaving responsible in social situations by Özen [17]. The scale consists of twenty phrases, ten of which are in usual order and the rest ten are in opposite order. In the scale

scored with quartet degrees, it is asked what kind of responsible behavior model are shown towards events and situations. As a response, it is expected to choose one of the choices 'never, sometimes and always' in written expression. The lowest score taken from the scale is 20 and the highest score is 80. The more scores mean the higher external control. Scoring is the act of collecting the points marked by individual. However, for reverse scoring, positive sentences should be turned into like that: for 1 point marked by the individual to 4, 2 points for 3, 3 points to 2 and the last 4 points to 1.

Development of IECS: In every stage of life, responsibility is often mentioned and supported by cultures and also it is tried to be taught. As the responsibility being an intractable and advanced character figure, in order to determine whether given responsibility education is effectual or not, appropriate measurement tool is needed. In this study though it is partly, in order to solve this shortcoming and to develop appropriate measurement tool for further studies and also to find out which factors have impact on responsibility, it is aimed to develop a Responsibility Scale for primary eight grade students and to determine whether their responsibility levels change according to different variables.

The tasks which the parents and educators should do are to teach kids socially accepted behaviors, to help kids adapting and behaving according to social and cultural norms by being positive models and influencing directly. Cüceloğlu [18] emphasizes that family has a great influence on the development of responsibility. According to him; mother and father, a fundamental unit in a family system, explain responsibility sense with behaviors and utterances. Not only parents but also everybody in family system should share the sense of responsibility.

At the basis of teaching responsibility lies the discipline towards the kid's developing ability of internal control and adapting his/her environment. The children can improve skills such as self-control, obeying rules, self-competence with a good training and using discipline methods effectively [2]. So that, in addition to family, social foundations and especially schools should teach social rules to students via direct instruction or model taking. With the help of education and model taking, the students can be responsible individuals [19].

At the end of literature analysis, the number of the researches on the topic is so few. In Turkey a few descriptive studies about social responsibility [20: 21] were carried out and also for primary fifth grade students Golzar [9] Responsibility Scale was developed. In addition to these, Conrad and Hedin's Individual and Social Responsibility Scale was adapted by Taylı [22]. Social Responsibility Scale Development for high school students by Önal [3] and The Sense of Responsibility and Attitude Scale by Özen [23] exist in the field. But there is not any scale or a study for the primary second degree students (6,7,8 Grades). For this reason, in order to determine the students' responsibility senses and attitudes degrees, to find out which factors influence the responsibility and to test whether the possible responsibility trainings are effective or not, this study is hoped to make very significant contribution to the field and also will light the way for the following studies.

The Internally and Externally Controlled Responsibility Scale which was developed in this study is thought that will be useful for especially for those who are studying with low level responsibility students at school such as teachers, psychological counselors, psychologists and also other persons studying at aid services. This study will also be beneficial for the preparation of programs towards bringing up externally controlled strong individuals by attaching importance to internal control psychology in the process of taking responsibility and teaching the concept responsibility. Moreover this study is hoped to be useful and important for the parents and teachers who have important roles in the process of the children's acquiring personality features with the knowledge and abilities which the study gives about valuating and developing the children's responsibility levels.

For the formation of the IECS' items which was developed for this aim, first of all, it was asked to answer the questions: what is responsibility, why do we behave in responsibility, what is the thing that enforces you to behave responsibly, what happens if you don't behave responsibly?, from the selected group; 70 students from university grade, 64 students from primary eight grades, 55 students from high school, 45 people from teachers, 60 persons from ranked staffs (co-ranking police officer and upper) at Police Department. Later, the answers given to these open-ended questions were classified and 70 items were formed. Then it was asked to 15 persons expert group which includes lecturers of the departments

Educational Sciences and Psychological Counseling and Guidance to determine how well these sentences are about responsibility sense and attitude. Some new arrangements were done according to incoming expert suggestions and critics. This form was applied to a 386 students group. After that by eliminating missing and faulty coded data, the data of 324 students were evaluated. By using the scores obtained from application, item analysis [24:25] based on the testing of difference between subgroup's and upper group's means was done and then for the sub two scales of the scale at the first dimension of the analysis, the items meaningful at the level of 0,001 were selected. Thus 20 items associated with the scale were determined. The reliability score (0,76) of the whole scale was calculated by the way of Cronbach Alpha reliability coefficient. At the scale, the items having the scores below 0,30 are eliminated. In the process of interpreting of variables which affect each factor, 0,30 level is generally accepted as the minimum factor burden [26]. Thus this level states approximate %10 of that variable's variance explained by that factor. At this scale item distinctive index was accepted as 0,30. The scale was turned into sub two scales by making Varimax vertical rotation process and item distinctive index was accepted as 0,30 and then a 20 items scale was developed. Cronbach Alpha reliability coefficient of the scale was found 0,73 for Internally- Controlled Responsibility and was calculated as 0,68 for Externally Controlled Responsibility.

Answering and Scoring: In this scale different life styles were given. It was demanded from the individuals to state behavior kind which was shown against these life styles.

This scale was developed for the aim of determining from where the individual takes power of behaving responsible in social situations by Özen [17]. The scale consists of twenty phrases, ten of which are in usual order and the rest ten are in opposite order. In the scale scored with quartet degrees, it is asked what kind of responsible behavior model are shown towards events and situations. As a response, it is expected to choose one of the choices 'never, sometimes and always' in written expression. The lowest score taken from the scale is 20 and the highest score is 80. The more scores mean the higher external control. Scoring is the act of collecting the points marked by individual. However, for reverse scoring, positive sentences should be turned into like that: for 1 point marked by the individual to 4, 2 points for 3, 3 points to 2 and the last 4 points to 1.

Who can use IECRS and for which aims can it be used?

Firstly, the psychologists can use IECRS with the aim of determining from where the client takes the power of behaving responsible in social situations when they need and determining the reflection level of responsibility level. The researchers can use to determine the relation between burdening responsible behaviors and other variables about responsibility. IECR is the scale which can be used by most of people for different aims.

Data Analysis: A factor analysis was done in the advanced studies of IECRS for selecting items. In order to find out IECRS' reliability coefficient, Cronbach Alpha was applied on the samples' scores of Internally and Externally Controlled Responsibility. IECRS' validity was also applied on the same group's IECRS and Locus of Control Test.

Scores taken from both scales were calculated with Pearson correlation coefficient.

Findings: At this section, findings about the results of factor analysis on IECRS and the results on IECRS' reliability and validity were presented.

Factor Analysis on IECRS: The outcomes of factor analysis implemented on IECRS' post form and the scores of 342 primary school students are given at Chart-1. Validity of the scale was done according to factor analysis and criteria validity. As criteria validity, Locus of Control Test was used at the stage of the scale's validity study and the correlation was found as (0,67). This result is meaningful at the level of 0,01.

Question	First Factor	Second Factor
Q12	0,66	
Q 20	0,65	
Q 10	0,61	
Q 19	0,56	
Q 4	0,53	
Q 17	0,52	
Q 13	0,51	
Q 14	0,46	
Q 13	0,44	
Q 14	0,41	
Q 3		0,73
Q 5		0,66
Q 6		0,63
Q 18		0,52
Q 2		0,51
Q 7		0,40
Q 16		0,38
Q 1		0,37
Q 8		0,32

At the end of the factor analysis done for testing the scale's structure validity, fundamental component analysis which do not require factor restriction, a nine item structure describing the variance's %61, 2 was encountered. As having difficulties in interpreting of factors and composing of meaning composition, by limiting two factors, a structure explaining the %30,48 of the variance was received with varimax upright down method.

First factor explains % 15,52 of the variance and the second one explains % 12,48 of it. But the item having very low item total correlations [8,12] was ejected from the scale. Remaining factors' burdens change between 0,32 and 0,73.

IECRS' Reliability: Reliability study of IECRS' post form was done over the scores taken from 342 students chosen without selecting from the students of these schools; Erzincan 75. Year Primary School, Central Primary School, Fatih Primary School. As IECRS is in Likert type, the whole scale and reliability study of subscales were calculated by the way of Cronbach Alpha reliability coefficient. At the end of the study, Cronbach Alpha reliability coefficient was found as 0,67 for the whole scale, as =0,73 for External control sub-dimension, as =0,62 for Internal Control sub-dimension. Calculated reliability coefficients show that the scale can be used with confidence.

IECRS' Validity: IECRS' validity was examined with the way of similar scales validity. IECRS, Locus of Control Scale were given to 342 students taken without selecting from the students of these schools; Erzincan 75. Year Primary School, Central Primary School, Fatih Primary School. The correlation between both scales' total scores and the scores about sub-scales were calculated by the way of Pearson Correlation Coefficient. The correlation was calculated as 0,67. The methods, internal-consistency and also re-test method, were used for the validity of the scale. Internal-consistency was found as Alpha =0,93 and its re-test reliability was found meaningful at the level of $r=0,73$.

Discussion, Suggestions and the Result: The study of IECRS's reliability and validity has made on the data taken from primary eight grades students. It is aimed to implement IECRS on everybody being ten or over ages. Therefore, the reliability and validity of the scale can be examined by implementing to those being different age levels, gender, education ranks and profession groups.

Two sub-scales of IECRS are there. Psychologists, researchers, lecturers and social psychologists and other pragmatists in their own intents can use sub-scales of IECRS one by one.

IECRS on which further studies will be applied to develop are a quartet graded scale like Liker type. During the development stage of the scale, at first quintet graded scale was thought and then it was decided not to implement quintet graded scale in order to implement the scale to low age samples. By implementing IECRS to people especially students, it can be determined applications in order to direct students' controlled responsibility from external periods towards internal periods and also what they understand from responsibility and these can make easier guidance counselor' duties working in the area of developmental guidance. One of the very fundamental principles of acknowledging the individual is to use obtained knowledge about the individual in order to contribute the individual's progress or an answer of a problem. Therefore the knowledge about the responsibility which student obtained from various resources via IECRS should be used absolutely for student development, fulfillment of himself or a problem's answer. By determining externally controlled students it can be discussed with the students' parents, their teachers, resources of other authorities on taking responsibility and directing the responsibility's origin towards internal processes with the help of IECRS. Some programs can be prepared in order to develop students' ability of using responsibility resources towards themselves and society. It is thought that such programs like 'development of social responsibility', 'development of individual responsibility', 'development of peer-mediation and responsibility' can be improved with the aim of raising responsibility levels, connecting the responsibility resource with internal supervisory focus and helping student, teacher and parents. It is hoped that parents can be pulled inside the school atmosphere more and students' academic successes will be improved with these programs' assistance.

During psychological assistance process, this scale can be applied to each client when needed. Thus Low responsibility and cause of the behavior can help the client to see its negative effects. It can be discussed on the sense of responsibility, lowness of the behavior and its reasons deriving from client and other external factors. After its ending it can help the client to improve the ability of benefit from responsibility resources in order to get rid of his own problems.

First outcomes on IECRS' reliability and validity are in quality of evidence for IECRS' reliability and validity. It can be useful for seeking new evidences on the scale's reliability and validity. The development of IECRS will be carried on and Responsibility Education Programs based on various theoretical approaches will be prepared in the future.

REFERENCES

1. TDK Sözlüğü, 2000. Türk Dil Kurumu Yayınları, İstanbul.
2. Chamberlin, L.J., 1994. "Developing Responsibility In Today's Students". Clearing House, 67(4): 204-206.
3. Önal, Ş., 2005. "Bir Sorumluluk Eğitim Programının Lise Dokuzuncu Sınıf Öğrencilerinin Sorumluluk Düzeylerine Etkisi". (Yayınlanmamış Yüksek Lisans Tezi). Uludağ Üniversitesi. Sosyal Bilimler Enstitüsü, Bursa.
4. Cevizci, A., 1997. Felsefe Sözlüğü, Genişletilmiş 2.Baskı, Ekin Yayınları.
5. Bolay, H.S., 1996. Felsefi Doktrinler ve Terimler Sözlüğü, 6. Baskı, Akçağ Yayıncılık, Ankara.
6. Yalom, I., 1980. Varoluşçu Psikoterapi. (Çev. Zeliha İyidoğan Babayigit), Kabalıcı Yayınevi, 2001.
7. Glasser, W., 1999. Kişisel Özgürlüğün Psikolojisi. İstanbul: Hayat Yayıncılık.
8. Nelson, D.B. and G.R. Low, 2004. Personal Responsibility Map (PRM), Oakwood Solutions, LLC.
9. Golzar, F.A., 2006. "İlköğretim 5. Sınıf Öğrencilerine Yönelik Sorumluluk Ölçeğinin Geliştirilmesi ve Sorumluluk Düzeylerinin Cinsiyeti, Denetim Odağı ve Akademik Başarıya Göre İncelenmesi" (Yayınlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi. Sosyal Bilimler Enstitüsü, Ankara.
10. Ryckmand, D. and S. Sherman, 1973. "Relationship Between Self-Esteem and Internal-External Locus of Control", Psychological Raport, 32: 1106, USA.
11. Fizpatirik, J., 2000. Developing Responsibility Behavior in Schools. İstanbul Kültür Koleji Yayınları, İstanbul.
12. Phares, E.J., 1976. Locus of Control a Personality Determinant of Behavior. Morritown, N,J, General Learning Press.
13. Chebat, J., 1968. "Social Responsibility, Locus of Control and Social Class", J. Social Psychol., 129(4): 1.
14. Berkowitz, L. and K. Lutterman, 1968. "The Traditional Socially Responsible Personality", Public Opinion Quarterly, 32: 169-185.
15. Kumchy, C.I. and L.A. Sayer, 1980. "Locus of Control in a Delinquent Adolescent Population". Psychological Reports, (3, Pt2), Jun: 307-1310.
16. Rotter, J.B., 1966. "Generalized Expectancies For Internal Versus External Locus of Control of Reinforcement, Psychological Monographs, 80: 56-67.
17. Özen, Y., 2008. "İç Denetimsel Sorumluluk Dış Denetimsel Sorumluluk Ölçeğinin Geliştirilmesi, Güvenirlilik ve Geçerliliği", Proceedings of International Conference on Educational Science, Famagusta, North Cyprus 23-25 June.
18. Cüceloğlu, D., 1996. İçimizdeki Çocuk. İstanbul: Remzi Yayınevi.
19. Ellenburg, F.C., 2001. "Society and School Must Teach Responsible Behavior", Educational Administration, 106(1): 9-11.
20. Karataş, F., 2001. "Ergenlik Döneminde Gençlerde Sosyal Sorumluluk, Demokratik Düşünce ve Başkalarını Kabulleme Değişkenleri Arasındaki İlişkilerin İncelenmesi". Yayınlanmamış Yüksek Lisans Tezi. Ankara Üniversitesi. Sosyal Bilimler Enstitüsü, Ankara.
21. Kurt, E., 2001. "Effects of Religiosity Traits and Social Responsibility Attitudes on Nonsyptoneous Helping Behavior in Natural Disaster" (Yayınlanmamış Yüksek Lisans Tezi), Boğaziçi Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
22. Taylı, A., 2006. "Akran Yardımcılığı Uygulaması Aracılığıyla Lise Öğrencilerinde Kişisel ve Sosyal Sorumluluğun Arttırılması". (Yayınlanmamış Doktora Tezi). Gazi Üniversitesi. Eğitim Bilimleri Enstitüsü, Ankara.
23. Özen, Y., F. Gülaçtı and Y. Çıkılı, 2004. "İlköğretim Öğrencilerinin Sorumluluk Duygusu ve Davranış Düzeyleri ile İç Denetimsel Sorumluluk ile Dış Denetimsel Sorumluluk Düzeyleri Arasındaki İlişkinin İncelenmesi", Erzincan Eğitim Fakültesi Dergisi, Cilt 4, Sayı 2.
24. Özgüven, İ.E., 1995. Psikolojik Testler. PDREM Yayınları, Ankara.
25. Tezbaşaran, A.A., 1996. Likert Tipi Ölçek Geliştirme Klavuzu. Psikologlar Derneği Yayınları, Ankara.
26. Büyüköztürk, Ş., 2006. Sosyal Bilimler için Veri Analizi El Kitabı. PEGAM A Yayınları. Ankara.