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ROMANIAN TRANSLATION AND LINGUISTIC VALIDATION OF THE HOW I THINK QUESTIONNAIRE

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Abstract

Self-serving cognitive distortions that are associated with externalizing behaviours such as physical violence or delinquency play an important role in understanding of anti-social behaviours in juveniles and other age categories. To explain cognitive distortions that are associated with externalized behaviours such as aggression or delinquency, some authors use the term self-serving cognitive distortions, which, regardless of the theoretical approaches, can play a significant role in the explanation of anti-social behaviour. This study aims to provide the Romanian academic and educational community with a linguistically validated version in Romanian language of the How I Think Questionnaire (Barriga et al., 2001). The How I Think Questionnaire (Barriga et al., 2001) consists of 54 items and 12 scales. The questionnaire was validated in the United States by Barriga et al. (2001), indicating very good psychometric properties. We chose this questionnaire because self serving cognitive distortions associate well with the four categories of anti-social behaviour as presented in DSM-IV (American Psychiatric Association, 1994), which are: Opposition-Defiance, Physical Aggression, Lying and Stealing. Following a backward and forward translation of the instrument, 44 undergraduate students completed the Romanian and English online versions of HIT. The good values of internal consistency and the high degree of linguistic equivalence between the two versions indicate the possibility to successfully use the Romanian version of HIT on further studies.

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1. Introduction

Adolescent anti-social behaviours are generally associated with a series of risk factors both individual (internal) and environmental (external), such as increased levels of impulsivity, sadistic personality features, substance abuse, social disadvantage, exposure to stressful events, school failure and family problems, such as dysfunctional communication between child and parent (Bailey & Scott, 2008). The specialty literature investigating the roots, development and maintenance of anti-social behaviour emphasizes the importance of self-serving cognitive distortions regarding the social interactions of juvenile delinquents (Gibbs, 2003).

Cognitive distortions are represented by undesirable or biased ways of participating to or giving meaning to life experiences (Barriga et al., 2001). To explain cognitive distortions that are associated with externalized behaviours such as aggression or delinquency, some authors use the term self-serving cognitive distortions (Barriga et al., 2000), which, regardless of the theoretical approaches, can play a significant role in the explanation of anti-social behaviour (Barriga et al. 2001). Self-serving cognitive distortions can be divided into four categories, such as: (1) Self-Centered – represented by attitudes by which individuals focus more on their own opinions, expectations, needs and rights, to the extent in which the opinions and needs of others are only a few, or never taken into account or respected; (2) Blaming Others – involves cognitive schemes for misdirection of guilt resulting from the culprits behaviour and externalized to sources outside the individual; (3) Minimizing/Mislabeling – cognitive distortions in which anti-social behaviour is viewed as an acceptable means to achieve certain goals, as well as the dehumanizing and degrading way of referring to the family and other individuals; (4) Assuming the Worst – cognitive distortions represented by attributing hostile intentions to others, taking into account that the most horrible scenario is inevitable or the perception that the personal behaviour is beyond the scope for improvement (Gibbs, Potter & Goldstein, 1995).

A number of psychological instruments can be found in the scientific literature that evaluate criminal thinking, criminal attitudes and cognitive distortions, such as: Criminal Sentiments Scale-Modified (Simourd, 1997), Measure of Criminal Attitudes and Associates (Mills, Kroner & Forth, 2002) and Psychological Inventory of Criminal Thinking Styles (PICTS; Walters, 1995). For the successful evaluation of self-serving cognitive distortions that are based on the four categories of cognitive distortions mentioned above, the How I Think Questionnaire was developed (Barriga & Gibbs, 1996). The How I Think Questionnaire (containing 54 items) was validated in the United States by Barriga et al. (2001), indicating very good psychometric properties (0.92-0.96).

1.1. The How I Think Questionnaire (HIT; Barriga et al. 2001)

The How I Think Questionnaire (Barriga et al. 2001) is used in various areas of psychology (research and education), sometimes to assess several behavioural changes after educational interventions. This is the case for the EQUIP program, which consists in educating moral judgment, pro-social abilities and how to improve errors in the way of thinking, and aims to diminish anti-social behaviour by treating cognitive distortions of juvenile offenders (Gibbs, Potter, & Goldstein, 1995). The original version of the HIT questionnaire is in English and has been translated and adapted in various languages, such as Spanish,

Dutch and French (Nas et al., 2008; Plante et al., 2012; Fernández et. al., 2013). The questionnaire was also validated in the cultural contexts of India and Malaysia (Rahim et al., 2013; Ara & Shah, 2015).

Regarding the psychometric properties of the HIT Questionnaire, studies have shown that the tool is reliable and valid (Barriga et al. 2001), having an internal consistency ranging from .92 to .96. HIT (Barriga et al., 2001) consists of 54 items, with a 6-points Likert type response scale, ranging from disagree strongly (1) to agree strongly (6). The HIT Questionnaire aims to assess self-serving cognitive distortions (Self-Centered, Blaming Others, Minimizing/Mislabeling, Assuming the Worst). HIT (Barriga et al., 2001) consists of 12 scales, meaning that of the 54 items, 39 items evaluate the four "self-serving" cognitive distortions, 8 items evaluate the level of anomalous responding, and 7 items are positive filters (in order to camouflage the 39 items). The 39 items also refer to the four categories of anti-social behaviour as presented in DSM-IV (American Psychiatric Association, 1994). These categories are: (1) Opposition-Defiance; (2) Physical Aggression; (3) Lying and (4) Stealing. The sum of Opposition-Defiance and Physical Aggression refers to the Overt Scale, which implies direct confrontation with the victim, and the sum of Lying and Stealing refer to the Covert Scale, which refers to the anti-social behaviours that do not involve direct confrontation with the victim (Barriga et al. 2001). Following the validation process of the How I Think Questionnaire, a significant association was found between self-serving cognitive distortions and specific externalizing behaviours such as anti-social behaviour (Barriga et al., 2008; Barriga et al., 2000).

2. Problem Statement

This study tests the hypothesis that the original English version of the How I Think Questionnaire (Barriga et al., 2001) is similar at linguistic level with the Romanian translated version (the outcome of the current study).

3. Research Questions

Are the two versions (Romanian version and English version) of the How I Think Questionnaire (HIT; Barriga et al. 2001) linguistically equivalent?

4. Purpose of the Study

This study aims to provide the Romanian academic and educational community with a linguistically validated version in Romanian language of the How I Think Questionnaire (HIT; Barriga et al. 2001). Thus, the Romanian version of HIT will allow for measuring self-serving cognitive distortions (Self-Centered, Blaming Others, Minimizing/Mislabeling, Assuming the Worst) of the juvenile delinquents from Romania. The linguistic validation of the instrument is based on the method described in a previous study (Copaci, Soos and Rusu, *in press*) addressing the Romanian translation and validation of the Civic Attitudes and Skills Questionnaire (Moely et al., 2002).

5. Research Methods

5.1. Participants

A total of 44 persons participated voluntarily in this study. All participants were undergraduate and graduate students from Arad, Romania, having the latest studies in high school (56.8%), bachelor's degree (27.3%) or master's degree (15.9%), with a knowledge level of the English language ranging from beginner (11.4%) to very advanced (2.3%). The English version was administered at an interval of two weeks after the completion of the Romanian version. Before completing the translated version (Romanian language) and the original version (English language) of the HIT (Barriga et al. 2001), the participants were given an informed consent consisting in an agreement of participation to the research and an assurance on the confidentiality of the collected data. The two versions of the instrument were uploaded on the Google Forms platform and the participants were asked to respond as sincerely as possible to the statements of the two versions. The participants of this study were comprised of 42 females and 2 males (N = 44), aged between 19 and 40 years (M = 26.82; SD = 6.94). The gender distribution of the sample reflects the female majority of students in the Psychology specialization of „AurelVlaicu'' University of Arad, Romania.

5.2. Translation of the HIT Questionnaire (Barriga et al. 2001)

For the translation and validation of the HIT Questionnaire (Barriga et al. 2001) the consent of the authors of the original instrument was required, which was later obtained by email. For the translation, two qualified local translators were required. The translators were native speakers of the Romanian language and authorized professionally in terms of using the English language.

One of the translators was asked to translate the English version (original version) instrument into the Romanian language (the target version of this study), and the other translator was asked to translate the Romanian version instrument back into English without having access to the original version. The translators have been asked to focus on clarity and simplicity, avoiding literary translation and pursuing the conceptual equivalence of the items.

In addition to calling for professional translators, a team of experts was developed in order to analyze the translated instruments and to agree upon the final version of the questionnaire. The team contained an English teacher, the first author of this study and a Psychology Professor from a Romanian High Education Institution. The translated instruments were analyzed item by item and processed within the team of experts.

5.3. Study Design and Procedure

The linguistic validation of the instrument is based on the method described in a previous study (Copaci, Soos and Rusu, *in press*) addressing the Romanian translation and validation of the Civic Attitudes and Skills Questionnaire (Moely et al., 2002). The research design is correlational, meaning that the correlation between the original version of HIT (English version) and the Romanian translated version stands for the similarity (linguistic equivalence) between the two versions. Following the method presented in Copaci, Soos & Rusu (*in press*), a plan consisting of six steps was used to linguistically validate the HIT Questionnaire (Barriga et al., 2001). These steps are the following: (1) initial translation; (2) analysis and

synthesis; (3) back-translation; (4) final analysis and synthesis; (5) testing and reviewing; and (6) elaborating the final version.

6.   Findings

First, using the SPSS system version 17.0, the descriptive statistics and the internal consistency of the HIT questionnaire (Barriga et al, 2001) were analyzed and processed for the scales and sub-scales of both language versions (Romanian and English). The Alpha Cronbach coefficients, for the scales and sub-scales of the translated version (Romanian language) of the HIT questionnaire (Barriga et al, 2001), vary between .531 (Positive Filters) and .863 (Overt Scale), with a coefficient on the whole questionnaire of .914. Regarding Alpha Cronbach coefficients for the scales and sub-scales of the original version (English language), results vary between .742 (Opposition-Defiance) and .894 (Covert Scale), with a coefficient on the whole questionnaire of .922.

Subsequently, the linguistic equivalence between the translated version (Romanian language) and the original version (English language) of the HIT instrument (Barriga et al, 2001) was verified using the Wilcoxon Signed Ranks Test. The results indicated that there are no significant differences between the two versions of the HIT questionnaire ($Z = -1.027$; $p = .304$), nor between its scales and sub-scales: Overt Scale ($Z = -.106$; $p = .915$), Covert Scale ($Z = -.630$; $p = .529$), Self-Centered ($Z = -.871$; $p = .384$), Blaming Others ($Z = -.580$; $p = .562$), Minimizing/Mislabeling ($Z = -.710$; $p = .478$), Assuming the Worst ($Z = -.263$; $p = .792$), Opposition-Defiance ($Z = -.651$; $p = .515$), Physical Aggression ($Z = -.049$; $p = .961$), Lying ($Z = -.746$; $p = .456$), Stealing ($Z = -.214$; $p = .831$), Anomalous Responding ($Z = -1.130$; $p = .259$) and Positive Filters ($Z = -1.837$; $p = .066$), which illustrates that the two versions (Romanian language and English language) are linguistically equivalent.

As well, the Wilcoxon Signed Ranks Test was used for each pair of items (Romanian language and English language) of the HIT questionnaire (Barriga et al, 2001). In 7 out of 54 items statistically significant differences were found, as follows: item 3 ($Z = -2.974$; $p = .003$), item 6 ($Z = -2.065$; $p = .039$), item 8 ($Z = -3.023$; $p = .002$), item 21 ($Z = -2.284$; $p = .022$), item 38 ($Z = -2.359$; $p = .018$), item 46 ($Z = -2.397$; $p = .017$) and item 48 ($Z = -2.620$; $p = .009$). The global analysis of the item pairs shows that the two versions (Romanian language and English language) of the HIT questionnaire are in a proportion of 87.04% linguistically equivalent.

The next step was to calculate the Spearman correlations for the HIT scale and sub-scales (Barriga et al, 2001) in order to verify the association between the two versions of the instrument (Romanian language and English language). It was found that the scales and the sub-scales of the HIT Questionnaire (Barriga et al, 2001) of the translated version (Romanian) and the original version (English) presented positive significant correlations between them, ranging between $r = .612^{**}$ (Positive Filters) and $r = .830^{**}$ (Lying), $p < 0.01$. Regarding the correlation between the global scores of the two versions (Romanian and English) of the HIT Questionnaire (Barriga et al, 2001), the results indicated a significant positive correlation between the two versions with $r = .761^{**}$, $p < 0.01$.

Spearman correlations were also calculated for each item pair of the original and translated version regarding the HIT Questionnaire (Barriga et al, 2001). With the exception of a single item all correlations

proved to be statistically significant, ranging from r = .303* (p <0.05; item 27) and r = .748** (p <0.01; item 35), except for item 39 (r = .283; p> 0.05).

7. Conclusion

The results of this study showed that at a psychometric level, the scales and sub-scales of the HIT Questionnaire (Barriga et al, 2001) of the translated version (Romanian language) had a good internal consistency, which certifies that the Romanian translated version can function as a reliable psychological instrument in Romanian language.

The correlation-based findings support the hypothesis of this study, which assumed that there will be conceptual and semantic equivalence between the two versions of the questionnaire (Romanian and English forms). The results indicate that there are no significant differences between the two linguistic versions, nor between its scales and sub-scales, which illustrates that the two versions (Romanian and English) are linguistically equivalent. Based on the results obtained for each pair of items (Romanian and English), statistically significant differences were found in 7 out of 54 items, as follows: item 3 (translation: *,,Uneori trebuie să minţi pentru a obţine ce îţi doreşti''*; original: *,,Sometimes you have to lie to get what you want''*), item 6 (translation: *,,Dacă am greşit, e din cauză că m-am încurcat cu persoanele nepotrivite''*; original: *,,If I made a mistake, it's because I got mixed up with the wrong crowd''*), item 8 (translation: *,,Nu poţi avea încredere în oameni, deoarece te vor minţi întotdeauna''*; original: *,,You can't trust people because they will always lie to you''*), item 21 (translation: *,,E în regulă să minţi dacă cineva e suficent de prost să creadă ce spui''*; original: *,,It's OK to tell a lie if someone is dumb enough to fall for it''*), item 38 (translation: *,,Am ascuns lucruri pe care le-am făcut''*; original: *,,I have covered up things that I have done''*), item 46 (translation: *,,Cand alţii mă înfurie se întâmplăsă-mi pierd cumpătul''*; original: *,,When I lose my temper, it's because people try to make me mad''*) and item 48 (translation: *,,Toţi au nevoie de ajutor câteodată''*; original: *,,Everybody needs help once in a while''*). Based on an in depth analysis of these items, it has been found that the formulation in the translated version of item 46 is slightly different from the formulation in the original version. Therefore, we suggest that this item should be presented as: *,,Când îmi pierd cumpătul este din cauză că oamenii încearcă să mă everveze''*. Taking into account the fact that there were no significant differences regarding the scales and sub-scales of this questionnaire between the two versions, the differences that occurred in the 6 remaining items may be due to the relatively small number of subjects (N = 44) or to the fact that they have reflected more with the translated version (Romanian). The global analysis of the item pairs between the two versions (Romanian and English) indicates that they are linguistically equivalent 87.04%.

The relationship between the two versions of the HIT Questionnaire (Barriga et al, 2001; Romanian & English), between its scales and sub-scales and between the pairs of items was analyzed using Spearman correlations. Results indicated that the correlations between the two versions (Romanian and English) and between its scales and sub-scales proved to be very strong. Lastly, the correlations that were computed on each pair of items were found to be statistically significant except for item 39 (translation: *,,Dacă găsesc un portmoneu pe care cineva neglijent l-a pierdut, merit să-l am''*, original: *,,If someone is careless enough to lose a wallet, they deserve to have it stolen''*). Considering the fact that there were strong correlations regarding the scales and sub-scales of this questionnaire for the two versions, a possible explanation for the

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insignificant correlation of item 39 may be due to the relatively small number of participants (N = 44) or to the fact that they identified themselves more with the Romanian translated version (Romanian). A closer look at this item indicates that the formulation in the translated version (Romanian language) is slightly different from the formulation in the original version. Therefore, we decided that the final form of this item will be presented as: *,,Dacă cineva e suficient de neglijent astfel încât să-şi piardă portmoneul, merită să-l aibă furat.''*

The results of this study are promising and relevant in opening the possibility to use the Romanian version of the How I Think Questionnaire (Barriga et al, 2001) to successfully evaluate Self-Serving Cognitive Distortions of juvenile delinquents from Romania. Therefore, it can be concluded that based on the results of this study, the two versions (Romanian and English) of the HIT Questionnaire (Barriga et al., 2001) are linguistically equivalent

References

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*. Washington, DC: Author.

Ara, E., & Shah, S.A. (2015). Validating "How I Think" Questionnaire - Measuring Self-Serving Cognitive Distortions among Adolescents in Kashmir. *International Journal of Physical and Social Sciences,* 5(6): 117-130.

Bailey, S., & Scott, S. (2008). Juvenile delinquency. In M. Rutter, D. Bishop, D. Pine, S. Scott, J. Stevenson, E. Taylor, & A. Thapar (Eds.), *Rutter's child and adolescent psychiatry* (pp. 1106–1125). Oxford: Blackwell Publishing.

Barriga, A.Q., & Gibbs, J.C. (1996). Measuring cognitive distortion in antisocial youth: Development and preliminary validation of the How I Think Questionnaire. *Aggressive Behaviour,* 22(5): 333-343.

Barriga, A.Q., Landau, J.R., Stinson, B.L., Liau, A.K., & Gibbs, J.C. (2000). Cognitive distortion and problem behaviors in adolescents. *Criminal Justice and Behavior,* 27(1): 36-56.

Barriga, A.Q., Gibbs, J.C., Potter, G., &Liau, A.K. (2001). *How I Think (HIT) Questionnaire Manual.* Champaign, IL: Research Press.

Barriga, A.Q., Hawkins, M., &Camelia, C.R. (2008). Specifi city of cognitive distortions to antisocial behaviour. *Criminal Behaviour and Mental Health,* 18(2): 104-116.

Copaci, I.A., Soos, A., & Rusu, A.S. (in press). Romanian and Linguistic Validation of the Civic Attitudes and Skills Questionnaire: Implications for Pre-Service Teachers' Evaluation. *Journal of Psychological and Educational Research (JPER)*.

Fernández, M.E.P., Rodríguez, J.M.A., Barriga, A. & Gibbs, J. (2013). Psychometrical properties of the "How I Think" Questionnaire (HIT-Q) in adolescents. *Psicothema,* 25(4): 542-548.

Gibbs, J.C. (2003). *Moral development and reality.* Thousand Oaks, CA: Sage.

Gibbs, J.C., Potter, G.B., & Goldstein, A.P. (1995). *The EQUIP Program: Teaching youth to think and act responsibly through a peer helping approach.* Champaign, IL: Research Press.

Mills, J.F., Kroner, D.G., & Forth, A.E. (2002). Measures of Criminal Attitudes and Associates (MCAA): development, factor structure, reliability and validity. *Assessment,* 9(3): 240–253.

Moely, B. E., Mercer, S. H., Ilustre, V., Miron, D., & McFarland, M. (2002). Psychometric properties and correlates of the Civic Attitudes and Skills Questionnaire (CASQ): A measure of students' attitudes related to service-learning. *Michigan Journal of Community Service Learning,* 8(2): 15-26.

Nas, C.N., Brugman, D., &Koops, W. (2008). Measuring Self-Serving Cognitive Distortions with the "How I Think" Questionnaire.*European Journal of Psychological Assessment,* 24(3): 181–189.

Plante, N., Daigle, M.S., Gaumont, C., Charbonneau, L. Gibbs, J., &Barriga, A. (2012). Validation of the "How I Think Questionnaire" in a population of French-speaking adolescents with externalizing behaviors.*Behav. Sci. Law,* 30(2): 196–210.

Rahim, K.M., Syariani, M.S.N., Azizah, O., &Ayu, M.S.G. (2013). Factorial validation of "How I Think" questionnaire among male inmates in Malaysia.*Malaysian Journal of Psychiatry,* 22(2): 19-32.

Simourd, D.J. (1997). The Criminal Sentiments Scale–Modified and Pride in Delinquency Scale: Psychometric properties and construct validity of two measures of criminal attitudes. *Criminal Justice and Behavior,* 24(1): 52–70.

Walters, G.D. (1995). The Psychological Inventory of Criminal Thinking Styles I: Reliability and preliminary validity. *Criminal Justice and Behavior,* 22(3): 307-325.