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Reliability and Validity of the Ukrainian Version of Second Version of the Emotional Schema Questionnaire (Lessii)

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Abstract

This study aims to investigate the reliability and validity of the Ukrainian version of second version of the Emotional Schema Questionnaire (LessII; Leahy, 2000) and provide expected scores for nonclinical samples.

Objective: Emotional schema concept is developed for determining beliefs and attributions about emotions. The aim of this study was to examine validity and reliability of the Ukrainian version of "Leahy Emotional Schema Scale" (LESS).

Method: The sample consisted of 1230 people as statistical sample, 62 percent were male, and 38 percent were female. Respondent's average age was 14-55 years old. Most of them including 39 percent had bachelor degree.

Result: The results of the study showed that due to the Cronbach's alpha that is higher than 0.7, the reliability of all variables is desirable. Confirmatory factor analyses support the schema domains. We conclude that the LessII is a psychometrically sound instrument that can be used Ukraine in research on early maladaptive schemas. Further research is necessary particularly in larger clinical samples [1].

Keywords: Emotional schema; Emotional Schema Questionnaire; LessII; Reliability; Validity

Introduction

Emotional schemas

Emotion includes evaluation, feeling and paying attention to a situation. Emotions are usually behavior driving forces and, in most cases, they are an external component Leahy RL [2]. Emotions are multi-dimensional, and they exist in the form of subjective, biological, goal-oriented and social phenomena. The trace of emotions could be observed in all of experiences of individuals. Emotions caused by emotional schemas are observed in all behaviors, relations, cognitions and responses to conditions Leahy RL [2]. These schemas include a series of rules guiding individuals in specific situations [3,4]. In emotional schemas it is tried to highlight the emotions and emotional process approaches [2] and to emphasize on individuals' interpretation of the emotions and planning done by the help of combination of core beliefs and emotional evaluations to evaluate and interpret individual's adaptation to the environment [2]. According to Leahy, emotional schemas are those which the future final clinical model is based on. Researches have shown that there is a correlation between certain schemas and prevalence of psychiatric symptoms.

Emotions can be tacked in all experience of people. In all behaviors, relationships, and response of people to the situations, emotions derived from emotional schemas is observable [4]. In emotional schemas model, high efforts put on accentuate emotions and strategies of emotional process [5] and it emphasize on emotions and plans by which combining core beliefs with emotional evaluations that specifies this assessment and interpretation of a person compatibility with that condition [6].

Table 1: Definitions of the Emotional Schema Scale (LESS).

Name of Scores	Definition
Validation	The belief that there is a receptive audience for his/her emotions.
Comprehensibility	Belief that one's own feelings are comprehensible and make sense to him/her. The other extreme would be the catastrophic interpretation of one's feeling.

Guilt	The belief that one should not have certain emotion, accompanied with shame, guilt, and embarrassment about an emotion.
Simplistic view of emotion	The perception that one's and others' emotions may be contradictory. One's ability to accept the contradiction.
Higher values	The tendency to use emotions to clarify one's underlying needs and personal values.
Uncontrollability	Perception that intense negative emotions are out of one's control.
Numbness	Tendency to isolate oneself from one's intense emotions.
Demands for rationality	Tendency to overemphasis on rationality and logic. Antiemotionality.
Duration	Belief that a strong feeling will last a long period of time.
Consensus	Recognition that many others have similar feelings to those that one experiences.
Acceptance of feelings	Tendency to accept own feelings and expend much energy to inhibit feelings.
Rumination	Tendency to ruminate and focus on one feeling and one thought. Lack cognitive flexibility.
Expression	Willingness to experience and express feelings openly
Blame	Belief that others cause one's negative feelings.

Participant responses are designed to evaluate the 14 emotional schema dimensions proposed by Leahy (e.g., simplistic view of emotion). Table 1 lists each of the dimensions and their attendant descriptions. The number of items used to evaluate the dimensions varies: acceptance of feelings utilizes seven items; rumination utilizes five items; comprehensibility, guilt, simplistic view of emotion, and consensus utilize four items; validation, higher values, control, and rational utilize three items; and numbness, duration, expression, and blame (Table 1).

Method

Demographic information

Results of demographic study indicated that out of 1230 people as statistical sample, 62 percent were male, and 38 percent were female. Respondent's average age was 14-55 years old. Most of them including 39 percent had bachelor's degree.

Descriptive statistic

Results of descriptive statistic indicated that invalidation with 2.7870 mean, Incomprehensibility with 3.2630 mean, Guilt with 3.1764 mean, Simplistic View of Emotion with 2.8805 mean, Devalued with 2.7593 mean, Loss of Control with 2.9439 mean, Numbness with 3.3126 mean, Overly Rational with 2.9443 mean, Duration with 2.8427 mean, Low Consensus with 3.1703 mean, Non-Acceptance of Feelings with 3.0626 mean, Rumination with 3.3947 mean, Low Expression with 2.4732 mean, and Blame with 4.5386 mean are reported [7-9].

Studying reliability of tools

To study reliability of tools Cronbach alpha was used. Statistic values for variables are as follow: for invalidation is 0.847, for Incomprehensibility is 0.911, for Guilt is 0.971, for Simplistic View of Emotion is 0.897, for Devalued is 0.887, for Loss of Control is 0.919, for Numbness is 0.922, for Overly Rational is 0.887, for Duration is 0.867, for Low Consensus is 0.941, for Non-Acceptance of Feelings is 0.922, for Rumination is 0.802, for Low Expression is 0.934 and for Blame is 0.950. Results of the study indicated that tools are reliable because Cronbach alpha is bigger than 0/7 (Table 2).

Table 2: Reliability of the tools.

Variable	Abbreviation	Mean	Standard deviation	Cronbach alpha
Invalidation	Inv	2.787	1.28479	0.847
Incomprehensibility	Inc	3.263	1.53351	0.911
Guilt	Gui	3.1764	1.30022	0.971
Simplistic View of Emotion	Sim	2.8805	1.33837	0.897
Devalued	Dev	2.7593	1.40723	0.887
Loss of Control	Loss. Cl	2.9439	1.33767	0.919
Numbness	Num	3.3126	1.35892	0.922
Overly Rational	Ove	2.9443	1.39886	0.887
Duration	Dur	2.8427	1.38876	0.867
Low Consensus	Low. C	3.1703	1.4311	0.941
Non-Acceptance of Feelings	N. Ac. F	3.0626	1.42401	0.922

Rumination	Rum	3.3947	1.12813	0.802
Low Expression	Low. Ex	2.4732	1.19842	0.934
Blame	Bla	4.5386	1.23398	0.95

To approve validity, structural equation approach was used by AMOS software. First, for investigating validity of the structure, first and second order Confirmatory Factor Analysis were used. Finally, for studying final model fitting, model fit indices were used. The model is as Figure 1. In this model, 15 latent variables are observed, explained and measure by 28 variables. Results of Confirmatory Factor Analysis in Table 3 are reported [10-12].
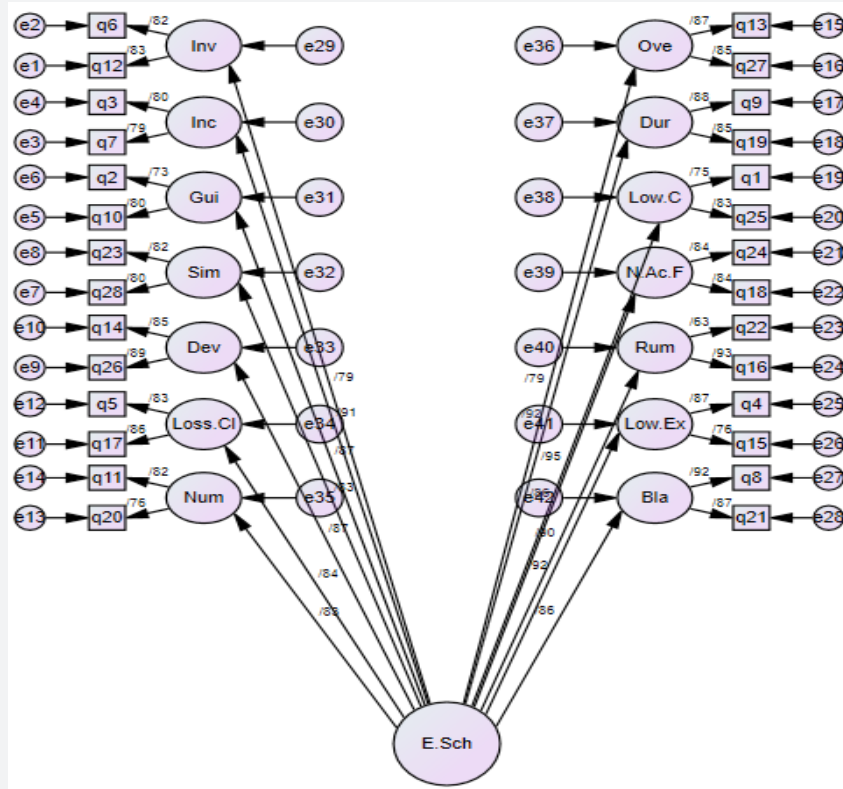

Figure 1: Designed model in the software.

Table 3: First order Confirmatory Factor Analysis.

Item		Variable	Estimate	S.E.	C.R.	P	item		Variable	Estimate	S.E.	C.R.	P
q^{12}	<---	Inv	/814				q13	<---	Ove	/866			
q^6	<---	Inv	/815	/034	26/421	***	q27	<---	Ove	/849	/036	31/867	***
q^7	<---	Inc	/782				q9	<---	Dur	/875			
q^3	<---	Inc	/796	/040	28/280	***	q19	<---	Dur	/843	/029	37/151	***
q^{10}	<---	Gui	/795				q1	<---	Low. C	/743			
q^2	<---	Gui	/726	/034	24/326	***	q25	<---	Low. C	/824	/038	28/779	***
q^{28}	<---	Sim	/795				q24	<---	N. Ac. F	/832			
q^{23}	<---	Sim	/814	/035	27/245	***	q18	<---	N. Ac. F	/842	/033	31/915	***
q^{26}	<---	Dev	/891				q22	<---	Rum	/630			
q^{14}	<---	Dev	/845	/022	36/583	***	q16	<---	Rum	/929	/050	23/818	***
q^{17}	<---	Loss. Cl	/856				q4	<---	Low. Ex	/870			
q^5	<---	Loss. Cl	/824	/029	31/165	***	q15	<---	Low. Ex	/754	/023	30/368	***
q^{20}	<---	Num	/755				q8	<---	Bla	/913			
q^{11}	<---	Num	/814	/045	25/276	***	q21	<---	Bla	/871	/021	40/699	***

Table 4: Second order Confirmatory Factor Analysis.

			Estimate	S.E.	C.R.	P
Num	<---	E.Sch	/829	/038	24/057	***
Loss. Cl	<---	E.Sch	/830	/038	28/411	***
Dev	<---	E.Sch	/867	/040	31/912	***
Sim	<---	E.Sch	/830	/039	25/750	***
Gui	<---	E.Sch	/864	/039	27/095	***
Inc	<---	E.Sch	/908	/040	28/359	***
Bla	<---	E.Sch	/853	/033	32/274	***
Low. Ex	<---	E.Sch	/921	/035	33/634	***
Rum	<---	E.Sch	/902	/037	21/318	***
N. Ac. F	<---	E.Sch	/861	/038	28/702	***
Low. C	<---	E.Sch	/953	/040	28/213	***
Dur	<---	E.Sch	/916	/034	33/659	***
Ove	<---	E.Sch	/789	/035	26/946	***
Inv	<---	E.Sch	/776	/038	24/354	***

Since CR rate is higher than 1/96 and considering that level of significance is lower than 0/05, all questionnaire items explain and measure significantly their latent variables. Results of second order Confirmatory Factor Analysis are in (Table 4).

Since CR rate is higher than 1/96 and considering that level of significance is lower than 0/05, all 14 variables under study explain and measure significantly E.Sch as latent variables. Factor load for Invalidation is 0.776, for Incomprehensibility is 0.908, for Guilt is 0.864, for Loss of Control is 0.830, for Numbness is 0.829, for Overly Rational is 0.789, for Duration is 0.916, for Low Consensus is0.953, for Non-Acceptance of Feelings is0.861, for Rumination is 0.902, for Low Expression is 0.921 and for blame is 0.853. Results of model fit are reported in (Table 5).

Table 5: Indices of model fit.

Model	CMIN/DF	NFI	RFI	IFI	TLI	CFI
		Delta 1	Rho 1	Delta 2	Rho 2	
Default model	1/960	/912	/877	/955	/936	/954

The relative chi-square divided by the degrees of freedom is good standard for the model and supporting data. Criterion for acceptance of this index ranges from 1to 5 which values near to 2 to 3 are explained as best values. Schumacker & Lomax defined 1-5 values for fit index while Mclv, & Carmines believed values in 2-3 range are acceptable. Owlman in 2001 accepted 1-2 range as good value and [7] assumed 1-3 as acceptable variables.

In above table, 960/1 is reported as Chi square which can be considered as acceptable variable. NFI value or normed fit index of Bentler and Bount was obtained 0/912 which is considered as good value based on 0/9 standard value. Therefore, this model is approved, and it is fit. RFI value of relative fit index is 0/877 which is considered as relative fit according to 0/90 as standard value. IFI value or incremental fit index is 0/955 which approves goodness of fit. TLI value of talkler- Louis was 0/936 which considering 0/90 as standard fit approved goodness of fit. CFI value or comparative fit index is 0/954 which is good fit considering standard value of 0/90 [13-16].

Discussion

The results of this study show that the Ukrainian version of LESS is a reliable and valid scale for the assessment of beliefs and attributions about emotions on non-clinical population. People towards their emotions. High level of reliability of Ukrainian version indicates that aim of the scale is appropriate. The relative chi-square divided by the degrees of freedom is good standard for the model and supporting data. Criterion for acceptance of this index ranges from 1to 5 which values near to 2 to 3 are explained as best values [17]. Schumacker & Lomax defined 1-5 values for fit index while Mclv, & Carmines believed values in 2-3 range are acceptable. Owlman in 2001 accepted 1-2 range as good value and [7] assumed 1-3 as acceptable variables. In above table, 960/1 is reported as Chi square which can be considered as acceptable variable.

Conclusion

NFI value or normed fit index of Bentler and Bount was obtained 0/912 which is considered as good value based on 0/9 standard value. Therefore, this model is approved, and it is fit. RFI value of relative fit index is 0/877 which is considered as relative fit according to 0/90 as standard value. IFI value or incremental fit index is 0/955 which approves goodness of fit [18]. TLI value of talker-Louis was 0/936 which considering 0/90 as standard fit approved goodness of fit. CFI value or comparative fit index is 0/954 which is good fit considering standard value of 0/90.

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References

1. Yavuz KF, Türkçapar MH, Demirel B, Karadere E (2011) Adaptation, validity and reliability of the Leahy Emotional Schema Scale Turkish version based on Turkish university students and workers. Dusunen Adam 24(4): 273-282.

2. Leahy RL (2003) Roadblocks in Cognitive-Behavioral Therapy: Transforming Challenges into Opportunities for Change. The Guilford Press, New York.

3. Beck AT, Freeman A (1990) Cognitive Therapy for personality disorders. Guilford Press, New York.

4. Young JE (1999) Cognitive Therapy for personality disorders: A Schema Focused approach. FL: Professional Resourcee Press, Sarasota, Florida.

5. Leahy RL (2002) A model of emotional schemas. Cognitive and Behavioral Practice 9(3): 177-190.

6. Stevens J (2011) Confirmatory and Exploratory Factor Analysis. In: Applied Multivariate Statistics for the Social Sciences, Yavuz KF, Türkçapar MH, Demirel B, Karadere E (Eds.), (4th edn.), Lawrence Erlbaum Ass, New Jersey, USA, pp: 385-454.

7. Young JE (2005) Schema-focused cognitive therapy and the case of Ms. S. Journal of Psychotherapy Integration 15(1): 115-126.

8. Kim J, Mueller CW (1978) Construction of Factor Scales. In: Factor Analysis: Statistical Methods and Practical Issues. (1st edn.), Sage Publications, California, USA, p: 60-73.

9. Dadsetan P (2007) Psychopathology transition from childhood to adulthood. Samt publications, Tehran, Iran.

10. Leahy RL (2001) Overcoming Resistance in Cognitive Therapy. The Guilford Press, New York.

11. Leahy RL (2015) Emotional Schema Therapy. Guilford Press, New York.

12. Leahy RL (2012) Introduction: Emotional schemas, emotion regulation, and psychopathology. International Journal of Cognitive Therapy 5(4): 359-361.

13. Leahy RL (2006) Emotional schemas and self-help: Homework compliance and obsessive-compulsive disorder. Cognitive and Behavioral Practice 14(3): 297-302.

14. Leahy RL (2007) Emotional schemas and resistance to change in anxiety disorders. Cognitive and Behavioral Practice 14(1): 36-45.

15. Leahy RL (2008) The therapeutic relationship in cognitive-behavioral therapy. Behavioral and Cognitive Psychotherapy 38: 769-777.

16. Leahy RL (2003) Cognitive Therapy Techniques. Fati L (Ed.), Tehran: Dangeh publications, Iran.

17. Sava FA (2009) Maladaptive schemas, irrational beliefs, and their relationship with the five-factor personality model. Journal of Cognitive and Behavioral Psychotherapies 9(2): 135-147.

18. Scott Mears G (2012) Examining the relationship between emotional schemas, emotional intelligence, and relationship satisfaction. A Dissertation Presented in Partial Fulfilment of the Requirements for the Degree Doctor of Philosophy. Liberty University, USA.

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