

Styles of Attachment Determined by the Slovak Version of sEMBU

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Abstract:

Introduction: The theory of attachment is widely recognized (Ainsworth, Blehar, Waters, & Wall, 1978). This theory is based on four basic types of relationships. The sEMBU questionnaire does not focus on the relationships but parental behavior, however, parental behavior is the presentation of the relationship. Our goal was to determine the types of attachment and to obtain information about secure attachment by using cluster analysis.

Methods: sEMBU primarily finds out about three basic patterns used in parental behaviour – rejection, emotional warmth and overprotection. We used the 23-item s(short)-EMBU which previously demonstrated to be satisfactory on the samples of students from Greece, Guatemala, Hungary, Italy, East-Germany, and Sweden (Arrindell et al., 2001). The Slovak translation of the original sEMBU was published in 2007 (Poliaková, Mojžišová, & Hašto, 2007). Since relationships are closely related to rejection, emotional warmth and overprotection, we tried to find behavioral patterns based on Bowlby's attachment theory. We did not use standard procedures. Using cluster analysis, we also sorted the sample into four groups based on the presupposed attachment styles.

Results: Overprotection (father) has the highest share for classification and differentiation in the cluster. Emotional warmth (mother) has the highest share for classification and differentiation in the cluster. We expected to find out that the secure type of attachment prevails over avoidance both in mothers and fathers.

Conclusions: Our results surprised us; in the case of mothers, secure attachment did not occur at all. We suggest to continue in the research of the Slovak version of sEMBU focused on the types of attachment, especially on the secure type of attachment.

Key words: (short)EMBU¹, parental behavior, attachment styles.

1 Introduction and methods

On the basis of Bowlby's attachment theory, Ainsworth, Blehar, Waters, and Wall (1978) identified three major styles of attachment in infancy – secure, anxious-avoidant, and anxious-ambivalent – and, linked them with caregivers' parental behavior. As in our

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¹ EMBU is a Swedish acronym for Egna Minnen Beträffande Uppfostran (My memories of upbringing: My memories as I was raised).

environment, only few authors pay attention to the styles of attachment (Hašto, 2005; Mojžišová, 2006; Poliaková, Mojžišová, & Hašto, 2007; Rozvadský Gugová, Heretik, & Hajdúk, 2014), we decided to apply cluster analysis to factor scores from sEMBU. sEMBU finds out about primarily three basic patterns used in parental behaviour – rejection, emotional warmth and overprotection (Rozvadský Gugová, & Eisemann, 2016). These three factors are not sufficient to determine the type of attachment.

In our research, we used the sEMBU questionnaire. sEMBU consists of 23 questions grouped into 3 subscales – Rejection, Emotional warmth and Overprotection. The questions are answered separately by fathers and mothers on a 4-point Likert scale. Many national standardizations in different countries and samples found general support for the validity of sEMBU (Arrindell, Emmelkamp, Brilman, & Monsma, 1983a, Arrindell, Emmelkamp, Monsma, & Brilman, 1983b; Arrindell et al., 2001; Gerlsma, Arrindell, van der Veen, & Emmelkamp, 1991; Castro, de Pablo, Gómez, Arrindell, & Toro, 1997; Muris, Meesters, & Brakel, 2003). The shortened form of EMBU has been filled in by students in 11 countries in Europe, Asia, Australia and South America within an international study on individual personality and fears evaluation (Arrindell, Sanavio, Aguilar, Sica, Hatzichristou, Eisemann, Recinos, Gaszner, Peter, Battagliese, Kallai, & van der Ende, 1999). The coefficients of internal consistency (Cronbach's α) for all scales were satisfactory (≥ 0.72). Different versions of EMBU have been standardized and translated in more than 25 countries (Rojo-Moreno, Livianos-Aldana, Cervera-Martínez, & Dominguez-Carabantes, 1999; Livianos-Aldana & Rojo-Moreno, 2003; García, Aluje, & Del Barrio, 2006).

1.1 Participants and outputs from descriptive statistics

Our final sample consisted of 970 participants recruited during their external pre-gradual study at DTI University (Dubnica Institute of Technology) in Dubnica nad Váhom in 2010-2014. All participants filled in the Slovak translation of sEMBU (Arrindell, Sanavio, Aguilar, Sica, Hatzichristou, Eisemann, Recinos, Gaszner, Peter, Battagliese, Kallai, & van der Ende, 1999) translated by Poliaková, Mojžišová and Hašto (2007).

The research sample in the study consisted of 507 females and 463 males. The mean age of participants was $M=31.743$; $SD=8.7317$ (from 18 to 62). The mean score in sEMBU in our study was for Rejection (father): $M=13.88$, $SD=3.250$; Rejection (mother): $M=14.44$, $SD=3.768$; Emotional warmth (father): $M=14.24$, $SD=3.190$; Emotional warmth (mother): $M=14.24$, $SD=3.214$; and Overprotection (father): $M=18.90$, $SD=3.509$; Overprotection (mother): $M=17.69$, $SD=3.990$. Our results are higher as the results published by Perris, Jacobson, Lindstrom, Von Knorring, and Perris (1980), who report the following scores: Rejection (father): $M=11.11$; Rejection (mother): $M=11.78$; Overprotection (father): $M=10.70$ and Overprotection (mother): $M=11.70$. But our results are close to the results published by Castro, de Pablo, Gómez, Arrindell, and Toro (1997), their score for Rejection (father) was: $M=16.32$, $SD=3.00$ and for Rejection (mother) it was $M=16.38$, $SD=2.74$.

The internal consistency for the subscales was $\alpha=.820$ for our factors of Father (without item no.9 $\alpha=.823$) and $\alpha=.856$ for our factors of Mother (without item no.20 $\alpha=.860$). The Slovak version of sEMBU seems to be quite reliable. Mean Item-total correlation for Rejection (father) subscale was from .310 to .652; for Emotional warmth it was from .304 to .752; and for Overprotection it was from .411 to .709. Our results for Rejection (mother) subscale ranged from .303 to .762; for Emotional warmth from .371 to .616;

and for Overprotection from .305 to .672. Our results are very similar to the results of other studies (see Arrindell et al., 2001).

2 Attachment styles

We conducted K-means cluster analysis to factor scores from sEMBU and principal component analysis (Varimax rotation) was performed (see Table 1a,b and Table 2a,b). The aim was to classify the cases into four clusters based on their factor scores. We analyzed fathers and mothers separately. Analyses stopped after 7 iterations (father) and 14 iterations (mother). The highest share for classification and differentiation in the cluster has Overprotection (father). The highest share for classification and differentiation in the cluster has Emotional warmth (mother).

The extracted clusters represent the following attachment styles:

Secure = ↓*Rejection*, ↑*Emotional warmth* and ↓*Overprotection*;

Fearful = ↑*Rejection*, ↓*Emotional warmth* and ↑*Overprotection*;

Fearful/Ambivalent = ↑*Rejection*, ↑*Emotional warmth* and ↑*Overprotection*;

Dismissive/Avoidant = ↑*Rejection*, ↓*Emotional warmth* and ↓*Overprotection*;

Dismissive (or Dismissive/Denying, more intensive than dismissive) = ↓*Rejection*, ↓*Emotional warmth* and ↓*Overprotection*;

Disoriented I. = ↓*Rejection*, ↓*Emotional warmth* and ↑*Overprotection*;

Preoccupied = ↓*Rejection* and ↑*Emotional warmth* and ↑*Overprotection*;

Disoriented II. = ↑*Rejection* and ↑*Emotional warmth* and ↓*Overprotection* (see Figure 1 and Figure 2).

For comparison, the prevalence rates in a large US national comorbidity survey that used the Adult Attachment Interview were as follows: 59% – secure; 25.2% – avoidant; 11.3% – anxious; and 4.5% – unclassifiable (Mickelson, Kessler, & Shaver, 1997). Here, it is important to say that a direct comparison of our findings with the attachment style classification is quite difficult because these are different methods for measuring adult attachment. Several statistical methods for the purposes of classifying persons according to their attachment styles have been published. In our study, we used the combination of factor and cluster analysis. Shi (2003) used cluster analysis as well but he classified persons to clusters based on the raw scores. We consider the factor scores from Varimax rotation the most suitable. We could not compare our findings with the results of other studies as nobody has used cluster analysis to determine the attachment style types in the sEMBU questionnaire.

Table 1a

Final Cluster Centers of the sEMBU scales (father, N=970)

	Cluster						
	1	2	3	4	5	6	7
Overprotection (father)	.986	-.207	-.507	2.069	-.824	.335	1.066
Em. warmth (father)	-.546	.285	1.026	.312	-.786	-1.578	.080
Rejection (father)	-1.466	.683	-.167	-.899	-.545	1.183	1.550

Table 1b

Final Cluster Centers and ANOVA of the sEMBU scales (father, N=970)

	Cluster		Error		F ^a	Sig.
	Mean Square	df	Mean Square	df		
Overprotection (father)	121.452	6	.246	958	494.507	.000
Em. warmth (father)	108.498	6	.327	958	332.064	.000
Rejection (father)	110.573	6	.314	958	352.436	.000

a – The highest share for classification and differentiation in the cluster has Overprotection.

Table 2a

Final Cluster Centers of the sEMBU scales (mother, N=970)

	Cluster						
	1	2	3	4	5	6	7
Overprotection (mother)	1.421	1.219	-.650	-1.059	.145	.836	-.435
Rejection mother	.926	-1.475	-.541	-.476	.324	1.282	.604
Em. warmth mother	-1.812	.573	-1.638	-.166	-.439	.257	.953

Table 2b

Final Cluster Centers and ANOVA of the sEMBU scales (mother, N=970)

	Cluster		Error		F ^a	Sig.
	Mean Square	df	Mean Square	df		
Overprotection (mother)	114.280	6	.291	959	392.364	.000
Rejection (mother)	114.925	6	.287	959	400.115	.000
Em. warmth (mother)	120.652	6	.251	959	479.931	.000

a. The highest share for classification and differentiation in the cluster has Emotional warmth.

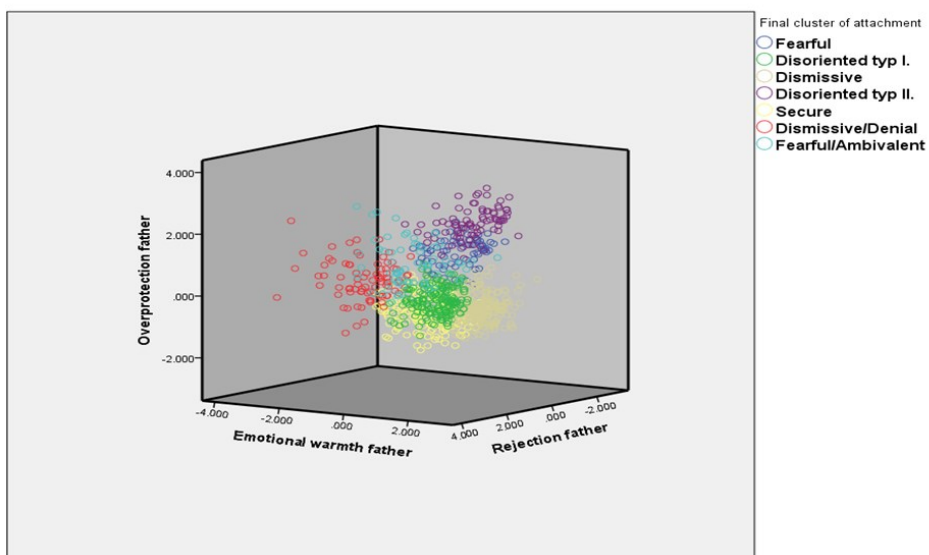


Figure 1. Final Cluster of attachment of the sEMBU scales (father, N=970).

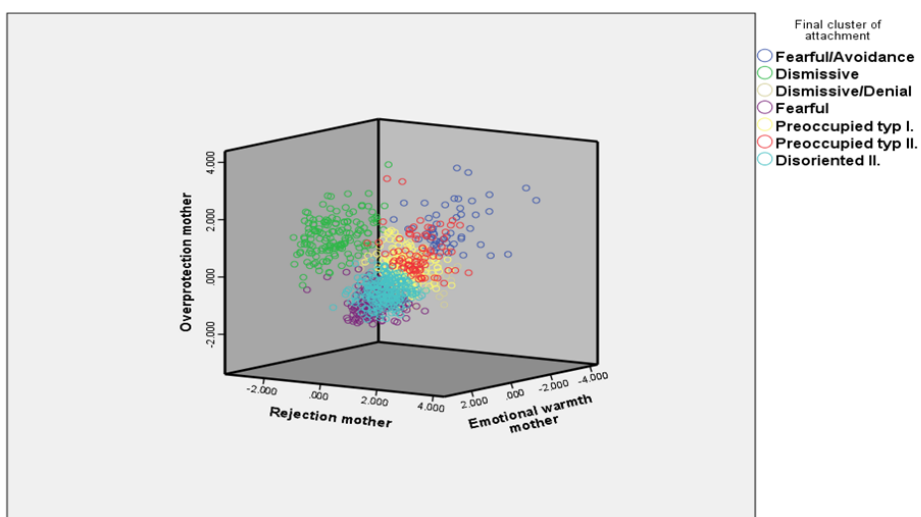


Figure 2. Final Cluster of attachment of the sEMBU scales (**mother**, N=970).

3 Discussion

The results of our study indicate that the Slovak translation of sEMBU is a reliable instrument for measuring the existing modelling patterns of rearing in Slovakia. The Cronbach's reliability coefficient of Slovak sEMBU was satisfactory (>80). Although three dimensions of sEMBU – Rejection, Emotional warmth, and Overprotection – were originally thought to be independent, most studies find at least a mild correlation between them. Exploratory analyses using forced three-factor solution sorted the items of the Slovak version of sEMBU into relevant scales (Rejection, Emotional warmth and Overprotection). Women rated their mothers higher than men. The extracted clusters represent the following attachment styles: Secure; Fearful; Fearful/Ambivalent; Dismissive/Avoidant; Dismissive (or Dismissive/Denying, more intensive than dismissive; Disoriented I.; Preoccupied; Disoriented II. Our results are shown in Figure 1 and Figure 2. We were surprised by the obtained results – we did not identify the preoccupied type of attachment in the sample of fathers, while in the case of mothers, the secure type of attachment was not present.

4 Conclusion

Although our results from previous studies (Rozvadský Gugová, Heretik, & Hajdúk, 2014; Rozvadský Gugová & Eisemann, 2016) prove that the Slovak version of sEMBU is a reliable instrument for measuring the existing modelling patterns of rearing in Slovak families, it is possible to use the questionnaire to determine the types of relationships as well. It would be particularly useful to analyze the relationship between self-reports and interviews based on a behavioral analysis of attachment. It seems that Emotional warmth is an important protective factor and Rejection is a sign of criticizing, shaming and negative expectations. Despite the presumptions regarding the occurrence of the secure type of attachment in mothers in our sample, which was based on cultural practices and the achieved average scores for emotional warmth, we found out that in the case of Slovak mothers in our sample, the secure type of attachment did not occur at all.

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