NEED FOR STRUCTURE FROM A THEORETICAL AND METHODOLOGICAL PERSPECTIVE

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Abstract: The paper presents an investigation of the dimensionality of the need for structure construct in two scales - PNS (Thompson et al., 2001) and NFCS (Bar-Tal, 1994) on three Slovak samples (N = 1093). In Study 1 we tested four models by means of confirmatory factor analysis. Results indicate that need for structure is a multi-dimensional construct. In Study 2 the convergent and discriminant aspects of validity were examined. Results indicate good convergent and discriminant aspects of validity of these two scales and also support the two-factor structure of the need for structure construct. The integrative potential of examining the need for structure construct in relation to social perception, personality and motivation is discussed.

Key words: need for structure, confirmatory factor analysis, validity

Acquiring knowledge represents one of the key features of human life. Understanding the processes and ways in which knowledge is created is one of the priorities of research in psychology. Neuberg and Newsom (1993) present two basic strategies by which people try to reduce the information load caused by the amount of information and stimuli from the environment affecting them: one is represented by *avoidance strategies*, which limit the amount of information to which they are exposed. The second way of reducing information load is an attempt to *structure* the world into a simplified, more manageable form.

People form structural representations of their outer and inner world in a continual process, by mutual interacting with their environment and by categorizing events into meaningful units. This is done in a process of generating and validating personal hypotheses about one's own world. In the cognitive approach this is known as a metaphor of "man-the-scientist", who observes the world around him, formulates hypotheses, makes plans, experiments with them, generalizes knowledge and accordingly adapts but also creates and modifies the environment around him (Ruiselová, Ruisel, 2000). Kruglanski (1989, 1990) elaborated this idea in formulating the *lay epistemic theory*. This theory postulates that acquiring knowledge happens in a two-phase process or epistemic sequence in which hypotheses are first generated and then validated. At the beginning, Kruglanski and his colleagues (Kruglanski, Freund, 1983) conceptualized *need for structure* as a situationally evoked motive activated in urgent situations (e.g., time pressure in a decision situation). Thompson and Naccarato (Thompson et al., 2001) elaborated the idea that need for structure might indicate

individuals' typical ways of reacting that will be evident regardless of the character of the situation. Need for structure is then defined as individual differences in the degree to which people actively seek and prefer simple cognitive structures (Neuberg, Newsom, 1993). This tendency consists of two correlated factors: desire for (simple cognitive) structure (e.g., positive affect as a reaction to predictable person or well organized event) and reaction to lack of structure (e.g., negative affect as a reaction to a chaotic, ambiguous event or an unpredictable person).

There is a dispute among authors concerning the structural nature of need for structure and related concepts (Neuberg, Newsom, 1993; Neuberg et al., 1997). The purpose of this study is a) to assess the factor structure of two measures that identify need for structure - the PNS scale (Personal Need For Structure; Thompson, 1989, 1992, in Thompson et al., 2001) and the NFCS scale (Need For Cognitive Structure Scale; Bar-Tal, 1994) on a Slovak sample and b) to contribute to the convergent and discriminant aspects of validity of these two measures.

STUDY 1

CONFIRMATORY FACTOR ANALYSIS OF TWO MEASURES IDENTIFYING NEED FOR STRUCTURE

Several authors have investigated the internal structure of the PNS scale (Thompson et al., 2001; Neuberg, Newsom, 1993; Hess, 2001; Sarmány Schuller, 2000a; Sollár, 2005). Results of exploratory and confirmatory analyses show (Neuberg, Newsom, 1993; Thompson et al., 2001) that a two-factor model fits the data better than a one-factor model. Hess (2001) also confirmed the better fit of the

two-factor solution on several independent age samples (n = 548). In the Slovak context only exploratory analyses (Sarmány Schuller, 2000a; Sollár, 2005) confirming the above-mentioned findings were conducted.

In the Slovak samples we compare the fit of the two-factor to that of the one-factor solution. The two-factor model consists of the correlated factors DFS (desire for structure) and RLS (reaction to lack of structure). To identify need for structure we used scales PNS (Neuberg, Newsom, 1993; Thompson et al., 2001) and NFCS (Bar-Tal, 1994). No results are known that examine the dimensionality of the NFCS scale except the one-factor model used by Bar-Tal. The NFCS scale consists of one factor that is created from all 20 items (e.g., Bar-Tal, 1994). Our previous exploratory analysis also showed good factor loadings of all items to one factor (Sollár, 2005).

METHODS

The research sample consisted of 1093 participants. Data collection was conducted in the years 2000 to 2006. The participants in Sample 1 were 300 secondary school graduates mainly from the western part of Slovakia (261 women). Mean age of Sample 1 was 19 years (SD = 1.1). Participants in Sample 2 were 793 applicants for external social work studies in FSV UKF in Nitra (557 women). Mean age of Sample 2 was 26 years (SD = 7).

The *PNS* scale (Personal Need for Structure) by Megan M. Thompson, Michael E. Naccarato and Kevin C.H. Park (Thompson et al., 2001; Neuberg, Newsom, 1993) is a six-point self-report scale where participants express the extent of agreement with statements oriented on structuredness of the environment. After excluding item 5
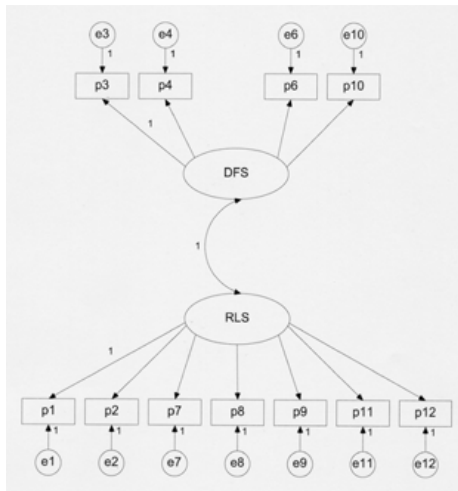
M1 - Factors of PNS scale constrained to unity
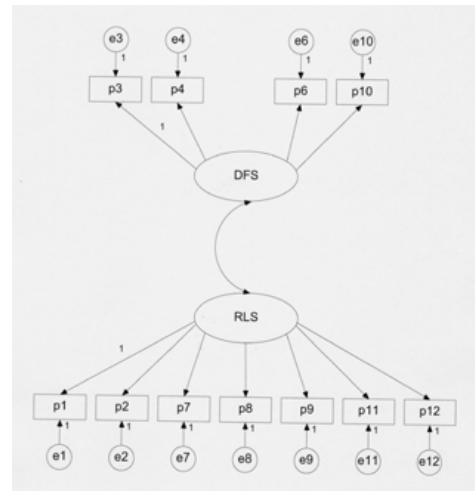
M2 - Factors of PNS scale are correlated
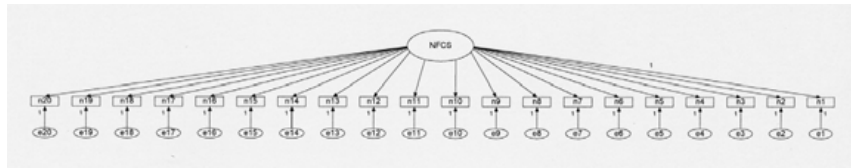
M3 - One factor model for NFCS scale

(Neuberg, Newsom, 1993; Sollár, 2005), the scale consists of 11 items. Items 2, 6 and 11 are inversely scored. Items 3, 4, 6 and 10 belong to DFS factor (Desire for Structure). Items 1, 2, 7, 8, 9, 11 and 12 belong to RLS factor (Reaction to Lack of Structure). Factor PNS is created by the sum of both factors.

The *NFCS* scale (Need for Cognitive Structure) by Yoram Bar-Tal is a six-point self-report scale where participant express the extent of agreement with statements oriented on preference for structured, clear situations and negative affect towards situations that are not well structured. Bar-Tal et al. (2002) introduced an opera-

tionalization of the same construct different from the PNS scale. Items were selected to reflect only the motivational aspect of the need for structure construct. The NFCS scale consists of one factor created from 20 items. Items are not inversely scored. Both scales were translated into Slovak by Ivan Sarmány Schuller in 1993.

In order to assess the overall fit of tested models, we used the indices: χ^2 statistic, the χ^2/df ratio, goodness of fit index (GFI), comparative fit index (CFI), RMSEA and Hoelter N (Arbuckle, Wothke, 1999; Urbánek, 2000). The CFI varies between 0 and 1, with higher values indicating a

better fit (Bentler, 1990). Acceptable values of relative chi-square χ^2/df are in a range between 2 and 5 (Urbánek, 2000) with lower than 3 widely considered as indicating a plausible model (Bollen, in Manetti et al., 2002). Values of RMSEA (root mean square of approximation) should be lower than .08 (Arbuckle, Wothke, 1999), PCLOSE not significant (Urbánek, 2000; Brown, 2006) and Hoelter N over 200 (Hoelter, 1983).

When using confirmatory factor analysis of the PNS scale, we tested the two-factor model in comparison with the unidimensional model. We used the procedure introduced by Bollen (1980). For models to be compared directly by studying the change in chi-square (per change in df) as a chi-square statistic, the zero order association between the two dimensions of need for structure is constrained to be one (thereby positing a single factor).

When modifying the one-factor model for the NFCS scale we used modification indices as a source of ill fit of the model (Brown, 2006) offered by AMOS 6.0. We compared these (nested) models with difference in chi statistic (Urbánek, 2000; Arbuckle, Wothke, 1999).

RESULTS

We tested two models for the PNS scale by means of confirmatory factor analysis. The first model (M1) was the one-factor model. The second model (M2) presumed that desire for structure (DFS) and reaction to lack of structure (RLS) are correlated components of need for structure. Similarly to Neuberg, Newsom (1993), we tested whether the two-factor model was more appropriate than the unidimensional model. When the association between DFS and RLS was constrained to unity, there was not an accept able fit to the data in either

sample; Sample 1: χ^2 (44, N = 300) = 121.8, p < .001; χ^2/df = 2.768; GFI = .93, CFI = .85, RMSEA = .077, PCLOSE < .001; Hoelter $N_{(01)}$ = 169 and for Sample 2: χ^2 (44, N = 793) = 315.9, p < .001; χ^2/df = 7.182; GFI = .93, CFI = .78, RMSEA = .088, PCLOSE < .001; Hoelter $N_{(01)}$ = 173.

The proposed two-factor model, with DFS and RLS as separate but correlated components of need for structure, fits the data better. Sample 1: χ^2 (43, N = 300) = 84.15, p < .001; χ^2/df = 1.95; GFI = .95, CFI = .92, RMSEA = .057, PCLOSE = .257; Hoelter $N_{(01)}$ = 240 and for Sample 2: χ^2 (43, N = 793) = 160.1, p < .001; χ^2/df = 3.72; GFI = .96, CFI = .90, RMSEA = .059, PCLOSE = .068; Hoelter $N_{(01)}$ = 334. When comparing the two presented models we achieved a significantly better fit of the two-factor model with the data, χ^2_{diff} (1, N = 300) = 37.64, p < .001 (for Sample 1) and χ^2_{diff} (1, N = 793) = 159.9, p < .001 (for Sample 2). Therefore, in agreement with previous studies (Neuberg, Newsom, 1993) the PNS scale measures two distinct but related components of the need for structure construct. In Table 1 we present parameter estimates for the two-factor model with correlation of the two factors.

We tested the two models for the NFCS scale by means of confirmatory factor analysis. The first model (M3) was the one-factor model used by Bar-Tal (e.g., Bar-Tal, 1994). Before the analysis we joined two samples together and split the new data file in approximately same size samples. In the first sample we verified the one-factor model (M3). This model did not fit the data well. Results for the first half of the joined sample were: χ^2 (170, N = 542) = 722.106, p < .001; χ^2/df = 4.248; GFI = .86, CFI = .77, RMSEA = .077, PCLOSE < .001; Hoelter $N_{(01)}$ = 162. After completing the first analysis we used modification indices to design model 2 (M4). When

Table 1. Unstandardized[*1] and standardized[*2] parameter estimates for the two-factor model of PNS scale in two Slovak samples

			Sample 1		Sample 2	
			Parameter estimates			
			*1	*2	*1	*2
PNS 3	<---	DFS	1	0.816	1	0.841
PNS 4	<---	DFS	0.791	0.664	0.752	0.705
PNS 6	<---	DFS	-0.612	-0.524	-0.803	-0.557
PNS 10	<---	DFS	0.809	0.674	0.795	0.627
PNS 1	<---	RLS	1	0.652	1	0.671
PNS 2	<---	RLS	-0.550	-0.369	-0.547	-0.404
PNS 7	<---	RLS	0.943	0.675	0.656	0.547
PNS 8	<---	RLS	1.073	0.636	0.948	0.660
PNS 9	<---	RLS	1.053	0.651	0.831	0.599
PNS 11	<---	RLS	-0.496	-0.370	-0.466	-0.396
PNS 12	<---	RLS	0.824	0.559	0.691	0.538
DFS	<-->	RLS	1	0.733	1	0.691

All parameter estimates are significant at .01 level

finding it theoretically possible we freed parameters of these items: items 1, 5, 13 (reflect positive emotions from clearly structured situations); items 10, 11, 17 (reflect negative experience when well structured situations are interfered with); items 2 and 8 (reflect discomfort in contact with indecisive people) and items 6 and 18 (reflect belief in clear-cut solutions in all problems).

The modified model (M4) was verified with the second half of the joined sample
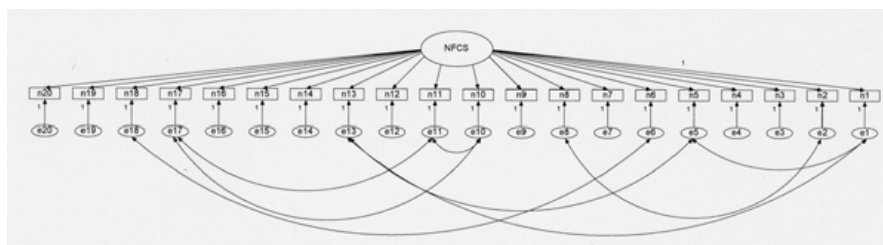
M4 - Modified model of NFCS scale with residuals of some items correlated

(procedure recommended by Brown, 2006): χ^2 (162, N = 551) = 439.733, p < .001; χ^2/df = 2.714; GFI = .92, CFI = .88, RMSEA = .056, PCLOSE = .062; Hoelter $N_{(.01)}$ = 259.

When comparing the two presented models for NFCS scale we achieved significantly better fit of the modified model

(M4) with the data, $\chi^2_{(8)}$ = 282.37, p < .001 than the first model (M3). Despite findings that none of the models show acceptable values in all indices, the modified model (M4) fits the data on Slovak sample better. In Table 2 we present parameter estimates for M3 and M4.

Table 2. Unstandardized[*1] and standardized[*2] parameter estimates for models (M3 and M4) of NFCS scale

	M3		M4						
	Parameter estimates								
	*1	*2	*1	*2					
NFCS1	1	0.489	1	0.383					
NFCS2	0.994	0.421	1.434	0.435					
NFCS3	1.449	0.630	2.037	0.640					
NFCS4	1.421	0.570	2.070	0.594					
NFCS5	1.374	0.596	1.779	0.594					
NFCS6	0.460	0.213	0.669	0.229					
NFCS7	1.235	0.447	1.567	0.413					
NFCS8	1.070	0.439	1.584	0.463					
NFCS9	1.073	0.468	1.547	0.505					
NFCS10	1.430	0.606	1.554	0.486	Correlated residuals for M4				
NFCS11	1.462	0.597	1.531	0.458				Parameter estimates	
NFCS12	1.137	0.476	1.752	0.546				*1	*2
NFCS13	1.102	0.585	1.338	0.498	e10	<-->	e17	0.429	0.241
NFCS14	0.717	0.292	0.970	0.288	e10	<-->	e11	0.696	0.394
NFCS15	1.117	0.415	1.695	0.426	e5	<-->	e13	0.414	0.345
NFCS16	0.907	0.356	1.230	0.334	e2	<-->	e8	0.527	0.274
NFCS17	1.645	0.644	1.781	0.513	e1	<-->	e13	0.562	0.469
NFCS18	0.497	0.201	0.396	0.119	e1	<-->	e5	0.311	0.251
NFCS19	1.084	0.398	1.453	0.385	e6	<-->	e18	0.539	0.269
NFCS20	1.084	0.470	1.477	0.428	e11	<-->	e17	0.251	0.133

All parameter estimates are significant at .01 level

DISCUSSION

CFA results of examining the PNS scale record findings very similar to those presented by Neuberg and Newsom (1993). The two-factor model of the PNS scale with correlated factors DFS (desire for structure) and RLS (reaction to lack of structure) is clearly better than the one-factor model. Even though chi statistic does not show good fit with the data (p < .001), other indices indicate good model fit with the data to a degree comparable with previous studies (Neuberg, Newsom, 1993).

The CFA results of examining the NFCS scale show sufficient fit in some, but not all indices. The significant result of chi statistic is not surprising, because of the many parameters to be estimated - much more than 20 (Bentler, Chou, in Manetti et al., 2002) - and also because of the sample size. After these results we modified the model, which was supported by possible theoretical consequences for the scale. It is possible to assume that some item residuals (mentioned above) are correlated. Hence, even though overall fit of the data is not ideal, significant improvement was achieved when we modified the former model. Fit of the model can be improved but the results obtained can be considered promising.

Both scales that identify the need for structure construct measure postulated models (based on the CFA results). In the case of the PNS scale the two-factor solution with correlated factors DFS (desire for structure) and RLS (reaction to lack of structure) is better than the one-factor solution in the Slovak sample. In the case of the NFCS scale the model with correlated residuals of some items in the Slovak sample has better fit. As some of the indices show, the discussed models can be improved.

STUDY 2

CONVERGENT AND DISCRIMINANT ASPECTS OF THE VALIDITY OF TWO MEASURES OF NEED FOR STRUCTURE

Results of Study 1 suggest that the PNS and NFCS scales can be used as two operationalizations of the need for structure construct. In Study 2, relation of the two factors of the PNS scale, relation of the two operationalizations of the construct - PNS and NFCS, relation of these variables to close constructs - AACS (Bar-Tal, 1994) and the relation with personality variables - anxiety, extraversion, dominance, affiliation and intelligence were examined.

First, results of Study 1 and previous research (Neuberg, Newsom, 1993; Hess, 2001) show that the two factors of the PNS scale are correlated. Correlations ranged from .54 to .74 (Neuberg, Newsom, 1993), and from .49 to .59 respectively (Hess, 2001). We assume that DFS and RLS are in significant positive relation in our sample also.

Second, to identify need for structure, the two measures (the PNS and NFCS scales) that Bar-Tal and his colleagues (1997, 2002) consider two operationalizations of the same construct (correlations between scales r = 0.45; Bar-Tal et al., 1999) were used. We presume that these variables are in significant positive relation.

Third, Bar-Tal suggests when studying need for structure to also take into account the ability of an individual to achieve cognitive structure. Bar-Tal states that need for structure and ability to achieve cognitive structure are independent (r = .02 in

Bar-Tal et al., 1999; r = -.03, in Bar-Tal, 1994; r = -.05, in Bar-Tal et al., 1997; r = .01 in Bar-Tal, Guinote, 2002; in Slovakia e.g., Sarmány Schuller, 1997, 2000b).

Fourth, in several studies examining need for structure, the relationship with other personality variables is well documented. Neuberg and Newsom (1993) found positive relation between need for structure and social anxiety. Sollárová and Sollár (2003) found that anxiety as a trait and state significantly correlates with need for structure. The relation of the RLS factor to anxiety is closer than that of DFS factor to anxiety.

Neuberg and Newsom (1993) found negative relation between need for structure and extraversion (high need for structure is connected with introversion). Ruiselová (2000) presents a similar finding in the Slovak adolescent sample.

Fifth, studying the relation between need for structure and interpersonal behavior is not covered in the scientific literature, even though at the beginning of interest in need for structure relationships, social context was studied (e.g., Moskowitz, 1993). The relationship of need for structure and interpersonal behavior as one of the most important aspects of personality (Leary, LaForge, Suczek, 1976) was studied.

Sixth, Neuberg and Newsom (1993) studied the relationship between need for structure and intelligence. They found moderate negative correlation, which was expected in our sample as well (see also Sarmány Schuller, Sollárová, 2002).

METHODS

Relations of variables were examined on three samples. The first two samples were identical to those used in Study 1. The participants in the third sample were 103 first-year university students (69 women) in two Slovak universities (FSES UK Bratislava and FSVaZ UKF Nitra), undergraduate students of social work, psychology and European studies. Mean age of Sample 3 was 21.7 years (SD = 4.7).

To identify the concepts introduced we used: the PNS scale (Thompson, 2001; Neuberg, Newsom, 1993) and the NFCS scale (Bar-Tal, 1994) to identify need for structure; the AACS scale (Bar-Tal, 1994) to measure ability to achieve cognitive structure; personality questionnaire - 16 PF (Cattell, 1975), the STAI (Ruisel et al., 1980); the ICL (Leary, LaForge, Suczek; adapted by Kožený, Galnický, 1976) to identify interpersonal behavior; and Amthauer's Test of the Structure of Intelligence TSI (Hrabal, 199 2) and Cattell's Culture Fair Intelligence Test CF2A (Heinzl, Janoušková, Veverka, 1970) to identify intelligence.

RESULTS

First, correlations between factors DFS (desire for structure) and RLS (reaction to lack of structure) ranged from .25 to .51. As we expected, correlations were positive and significant.

Second, all observed correlations of the PNS factors and the NFCS factor were statistically significant and positive. Correlations of NFCS and DFS factors were weaker (.35 to .61) than with RLS and PNS factors (.63 to .74). The agreement with the presumption supported the convergent aspect of validity of these need for structure variables.

Third, relation between DFS and ability to achieve cognitive structure was nonsignificant and weak. Correlations with other need for structure variables (RLS, PNS and NFCS) were negative. The higher the need for structure the lower the ability

to achieve cognitive structure. Orthogonal relationship is not confirmed for all variables.

Fourth, statistically significant relations between need for structure variables (RLS, PNS and NFCS) and anxiety were found, which confirms former findings (Neuberg, Newsom, 1993; Ruiselová, 2000). High need for structure is associated with high anxiety. We did not find significant relationships between DFS factor and anxiety, which indicates a different relation of the two PNS factors to other variables.

Statistically significant relations between need for structure and extraversion in all factors were found. Correlation coefficients ranged from .15 to .25, with all being negative. This confirms previous findings concerning negative relationship between need for structure and extraver-

sion (Ruiselová, 2000; Neuberg, Newsom, 1993).

Fifth, statistically significant relations between RLS, PNS and NFCS factors and dominance-submissiveness were found. In all variables mild negative correlation was found. The higher the need for structure, the lower the dominance (higher submissiveness). For the factor DFS and dominance relation, no significant correlations were found. These results also support different relations of the two factors of the PNS scale to other variables. No significant relation between need for structure and affiliation-hostility was found.

Sixth, modest negative correlation between need for structure and intelligence was found (correlations not higher than .27). These findings also support previous findings (Neuberg, Newsom, 1993).

Table 3. Correlations of four variables of need for structure with other variables

Variables	Sample	DFS	RLS	PNS	NFCS
RLS	1	.363***	-	-	-
	2	.271***	-	-	-
	3	.501***	-	-	-
PNS	1	.745***	.879***	-	-
	2	.689***	.872***	-	-
	3	.805***	.904***	-	-
NFCS	1	.455***	.671***	.699***	-
	2	.355***	.631***	.643***	-
	3	.612***	.694***	.743***	-
AACS	1	.022	-.379***	-.254***	-.311***
	3	.130	-.286**	-.111	-.120
Anxiety (16PF)	1	.096	.499***	.398***	.406***
Anxiety STAI - state	1	.122*	.361***	.315***	.214***
	2	.061	.332***	.272***	.274***

Table continues

Table 3 (continued)

Variables	Sample	DFS	RLS	PNS	NFCS
Anxiety STAI - trait	1	.099	.426***	.353***	.273***
	2	.032	.408***	.321***	.386***
Extroversion (16PF)	1	-.161*	-.240***	-.250***	.210***
	2	-.047	-.436***	-.302***	.388***
Dominance	3	-.034	-.322**	-.243*	-.205*
Affiliation	3	.101	.031	.073	-.033
IQ_IN sentences	1	-.139*	-.128*	-.164**	-.137*
IQ_EL word eliminating	1	-.093	-.037	-.078	-.157**
IQ_AN analogies	1	-.266***	-.148*	-.239***	-.263***
IQ_GE generalizations	1	-.117*	-.147*	-.162**	-.195**
IQ_AR arithmetics	1	-.137*	-.176**	-.185**	-.191**
IQ_NU numerical rows	1	-.105	-.067	-.099	-.135*
IQ_PL geometry	1	-.070	-.099	-.098	-.145*
IQ_SP cube tasks	1	-.072	-.040	-.064	-.002
IQ_ME memory	1	-.067	-.072	-.076	-.053
SUM TSI	1	-.180**	-.162**	-.202***	-.224***
CF2A fluid IQ	1	-.141*	-.194**	-.206***	-.238***

Legend: * p < .05, ** p < .01, *** p < .001

DISCUSSION

The PNS and NFCS scales can be considered as two operationalizations of the need for structure construct. We incline to Neuberg, Newsom (1993), Thompson et al. (2001) and Hess (2001) that need for structure consists of more than one variable or factor. This assumption is supported by lower correlations of the DFS factor and the NFCS factor and also by higher correlations of the NFCS factor with anxiety than correlations of the DFS factor with anxiety. The PNS scale identifies two related components of the construct (motivational and affective) as distinct variables. Contrary to Bar-Tal (1994), it is likely on Slovak data that the NFCS scale measures both - motivational and affective component, not only the motivational one.

Bar-Tal (Bar-Tal, 1994; Bar-Tal, Guinote, 2002) concludes that need for structure is not related to ability to achieve cognitive structure. For the university participants (n = 94) we confirmed the orthogonal relationship of the PNS and NFCS factors (correlations were not higher than .14). In samples other than university students this relation was stronger. The different result can be influenced by using

not only sum score for the PNS scale but also two scores for the DFS and RLS factors. However, explaining this result requires further research.

In investigating relations of need for structure to other variables, relations with some personality variables, interpersonal variables and intelligence were examined. The different relation to these variables of two components of the need for structure construct was confirmed. These findings support previous research (Neuberg, Newsom, 1993; Ruiselová, 2000; Sarmány Schuller, 2000a). The importance of studying need for structure in relation to other psychological variables is also documented in findings of relationship with fundamentalism (Sarmány Schuller, Stríženec, 1999; Adamovová, 2001; Ernestová, 2004).

GENERAL DISCUSSION

In previous research concepts conceptually close to need for structure were studied. Each of these concepts has its own theoretical background (tolerance of ambiguity - Frenkel-Brunswik, 1949; Bunder, 1962; authoritarian personality, dogmatism - Rokeach, in Sarmány Schuller, 2001; uncertainty orientation - Sorrentino et al., 1988; need for cognition - Cacioppo, Petty, Kao, 1984; need for cognitive closure - Webster, Kruglanski, 1994; category width - Pettigrew, in Ruisel, 2004). In their research Neuberg and Newsom (1993) raised the point that measures constructed to these constructs assess complex constructs. Although these scales include the need for structure component, they probably also include different constructs that limit their use for direct operationalization of need for structure. Bar-Tal et al. (1999) puts it that these concepts have a common presumption that cognitive processes used by individuals with a high need for structure

are based on categorization, that they are nonsystematic and heuristic. On the other hand, individuals with low need for structure prefer systematic or individuating processes in reducing uncertainty. At the same time we support Bar-Tal's notion that it is important to also consider ability to achieve cognitive structure when studying need for structure (Sollár, 2005). The results of the second study support good convergent and discriminant aspects of validity of the PNS and NFCS scales and a different relationship of the two components of need for structure with other variables as well.

As do the other researchers, Neuberg and Newsom (1993) and Bar-Tal (1994), we too tend to recommend studying need for structure because of its integrative potential for understanding topics to do with cognition, personality and motivation. We regard as insufficiently acknowledged the approach of Arie Kruglanski and his lay epistemic theory (Kruglanski, 1989, 1990) in understanding the nature of the need for structure construct in the context of cognition processes, social cognition and motivation to knowledge (Sollár, Adamovová, 2007). As Heller (2004) postulates, Kruglanski in his research and approach overcomes one of the weaknesses of social cognition research by emphasizing social cognitive principles in the social area as opposed to emphasizing only an individualistic approach.

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POTREBA ŠTRUKTÚRY Z TEORETICKÉHO A METODOLOGICKÉHO HĽADISKA

T. S o l l á r

Súhrn: Príspevok sa venuje skúmaniu dimenzionality konštruktu potreba štruktúry meraného dvomi škálami - PNS (Thompson et al., 2001) a NFCS (Bar-Tal, 1994). Na viacerých nezávislých vzorkách (N = 1093) sme skúmali pomocou konfirmačnej faktorovej analýzy štyri modely. Výsledky naznačujú, že potreba štruktúry je viacdimenzionálny konštrukt, skôr ako jednodimenzionálny. V druhej štúdii sme sa venovali konvergentným a diskriminačným aspektom validity škál PNS a NFCS. Skúmali sme vzťah týchto dvoch meracích nástrojov; ďalej sme potrebu štruktúry skúmali vo vzťahu k blízkym konštruktom: schopnosť vytvárať kognitívnu štruktúru; k osobnostným premenným: úzkosť, extraverzia, interpersonálne správanie; a k inteligencii. Výsledky potvrdzujú dobrú validitu meracích nástrojov v skúmaných aspektoch, ako aj diferencovanie dvoch faktorov v rámci konštruktu. V príspevku ďalej diskutujeme o integratívnom potenciáli skúmania potreby štruktúry pre oblasti kognitívneho poznávania, osobnosti a motivácie.