

**STEREOTYPING MANIFESTATION IN DIFFERENT AREAS
OF ADULT PSYCHOLOGICAL LIFE**

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Abstract

In our world today, adults are increasingly faced with stress; the overwhelming flow of events obliges a person to act quickly and precisely, any wrong decision, any behavior that turns out to be even more problematic. And there are more and more of these stresses every day. And it is not clear how to act and be further. As a result, a person faces uncertainty and different psychological disorders. One of the main reasons of stressful situations, we believe, is stereotypical thinking, when a person acts according to a previously elaborated algorithm and the world becomes different every day and one has to act differently. By understanding the true causes of stereotypes, psychologists, psychotherapists can look at the problem in a broader way.

The aim of the study was to empirically examine the impact of stereotyping in different spheres of adult psychological life: cognitive, emotional, behavioral, interpersonal; to analyze the relationships between the childhood fears manifestation, stereotyping and psychological problems manifestation. The techniques that was used during the study are the following: Tomsk Questionnaire of Rigidity TOR by Zalewski G.V., Scale of Stimulus Types Ambiguity Tolerance MSTAT-I; New Questionnaire of Tolerance for Uncertainty NTN; Scales of Anxiety and Worries STAI; Dysfunctional Beliefs Questionnaire PBQ-BPD; Personal beliefs Examination SPB. The results of the study revealed that childhood and adult fears have a significant impact on the formation of stereotypical adult behavior. We also identified the following: the relationship between childhood fears and stereotyping; the influence of childhood fears on rigidity, tolerance, intolerance, the formation of dysfunctional and personal beliefs, and anxiety. There is some compelling evidence that stereotyping manifests itself in the cognitive, emotional, behavioral and interpersonal psychological spheres of human life, with different kinds of fears at its core. We introduced a stereotyping index (ratio of intolerance to tolerance).

Keywords: dysfunctional belief, intolerance, personal belief, rigidity, stereotyping, fear, tolerance, anxiety.

Introduction

In the course of their lives and activities, people quite often make decisions, take actions and other actions based on already established patterns of thinking and behavior. Such simplified, schematized algorithms of action are stereotyped behaviors. The modern life requires successive and accelerated changes from a person, so under such circumstances any stereotype becomes a hindrance. In view of this, we see the need for a comprehensive study. This publication is a continuation of our theoretical and empirical research.

Object of the article. The object is to prove empirically that problems of modern adult man originate in childhood which systematically influences stereotype formation

and, as a consequence, performs a number of changes in psyche which manifests itself at the level of operation of individual links of its activity and integral human behavior.

Theoretical background

The studies of Krasnykh V., Vorkachev S., Karasik V., Nikitin M., Sternina I., Donets P., Ovchinnikova I., Serdyuk S., Grishaeva L., Pischalnikova V., Ageev V., Lomov B., etc. are of subject interest in modern psychology.

We have specified an *individual stereotype* as a rigid-stable image of human consciousness to objectively existing phenomena, On the basis of a preliminary analysis of scientific sources, which allows to perceive the surrounding reality in a convenient form for him. Accordingly, *stereotyping* is a process of schematized simplification of reality displayed in experiences, thinking, communication and actions (i.e. has affective, cognitive and behavioral aspects). The concept of "stereotyping" reflects a high level of stereotypes in certain spheres of human life.

The disadvantages of stereotyping are that it creates sustainable structures in the individual's mind. They are difficult to destroy because they are quite well worked-out and often not recognized by a person. They are conservative and not always adequate in the nature of perceptions.

The stereotypes formation takes place throughout life of a man and one of its most important characteristics is its adaptive nature. It begins to operate before awareness is turned on, and it imposes a specific imprint on the information that is perceived by the senses.

Methodology

It is a difficult task to study stereotypes empirically, as there are no special tools available. We have chosen 6 methods: Omsk Rigidity Questionnaire TOR by Zalewski G. V. (2000), fragment; Multiple Stimulus Tolerance Scale MSTAT-I (McLain, 1993), modified by Osin E. M. (2010); New Ambiguity Tolerance Survey NTN (Osin T. M., 2010). New questionnaire of tolerance to uncertainty NTU (Kornilov T.V., 2010); Anxiety and Disturbance Scales STAI (Spielberger, Gorsuch & Lushene), adapted by Khanin J.L. (Khanin, 1976); PBQ-BPD (Butler, Beck, 2002), adapted by Konina and Kholmogorova (Konina, Kholmogorova, 2016); SPBQ Personal Beliefs Survey (Kassinove, Berger, 1988).

The characteristics of the sample: 130 persons aged 21 to 49 years (mean age 32.3 ± 5.78), among whom 71 women and 59 men were employees of a large industrial enterprise in Ukraine.

The Tomsk Rigidity Questionnaire (TRQ) by Zalewski G. V. defines the rigidity as an inflexibility and maladaptability of the psyche underlying the pathogenesis of neuropsychiatric disorders: inflexibility in self-assessment, inability to reassess the established system of values "under the pressure of experience", fixed forms of behavior, inability to take a new position in relation to the environment changing (Zalevsky, 2000).

After the pilot study, we used one scale, the "Actual Rigidity" Scale, as an autonomous instrument aimed on the determination of the rigidity in a narrow sense - as the inability to change an opinion, attitude, setting, motive, emotional stress mode if objectively necessary.

The actual rigidity average index in the sample consisted to 25.55 ± 4.57 (range of estimates from 15 to 37). The distribution corresponds to normality criteria: Kolmogorov-Smirnov Z criterion equals 1.007 with $p = 0.262$.

The importance of the construct of tolerance to uncertainty (hereinafter referred to as TU) - the ability of a person to accept the unknown, to resist contradictory information, to overcome the conflict and tension arising in a situation of ambiguity - is extremely increasing in modern psychodiagnostics. A tolerant person is described as one who accepts the novelty and volatility of situations and is able to operate productively in them, while an intolerant person is one who does not accept the novelty of situations, the diversity of the world, and is stressed when there is a possibility of multiple interpretations of stimuli (Kornilova, 2010). **We consider tolerance for uncertainty as a phenomenon that is the opposite of stereotyped behavior from a psychological perspective.**

The Multiple Stimulus-Types Ambiguity Tolerance Scale-I of Mclain D. (MSTAT-I; McLain, 1993) examines the responses to different types of ambiguous stimuli, ranging from attraction to intolerance, to stimuli that are perceived by individuals as unfamiliar, complex, variable, or interpretatively contradictory.

The Table 1 describes that our sample averages are slightly lower than those of the standardized sample. This can be explained by age, as adults are less receptive to uncertain situations than students.

Table 1

MSTAT-I Normative Questionnaire Scores modified by Osin E.

	Sample of adults, 130 people	Sample standardization (Osin E.M., 2010)
Attitude to novelty (8, 14, 15)	11,50±2,94	13,92±3,90
Attitude to difficult situations (5, 9, 10, 12, 13, 17, 19)	28,79±4,91	33,64±7,46
Attitude to uncertain situations (1, 2, 4, 3, 6, 7, 11, 16, 18, 22)	35,19±7,29	38,57±9,37
Total TU Score	75,44±13,34	100,01±19,43

The New Questionnaire of tolerance to uncertainty (NTU, Kornilov T.V., 2010) is based on a three-factor model obtained empirically. The main feature of the author's model is that tolerance and intolerantness are understood not as opposite poles of one variable, but as independent scales associated with manifestations of different psychological properties. We are most interested in the intolerance manifestation - a stereotypical tendency to perceive and interpret the environment, current life events as a source of threat or discomfort.

While processing and analysis of the NTN individual results we noticed that the indicators of tolerance and intolerance of one person could be equally high, equally low or significantly differ from each other. So, tolerance for uncertainty as an integral personality trait should not be determined by the quantitative measure of these two indicators, but by their correlation. According to these considerations, we have

introduced the additional quantitative indicator, which we called the Stereotyping Index - the ratio of ITO to TU:

$$SI \text{ (Stereotyping Index)} = ITO \text{ (Intolerance index)} / TU \text{ (Tolerance Index)}$$

Based on the number of questions in the scales, if the ISO value exceeds 13/12 (i.e. 1.08), this indicates the prevalence of intolerance over tolerance, in other words - the propensity for stereotypical behavior. The SI value in the sample ranges from 0.82 to 1.54. The data distribution corresponds to the characteristics of normality ($Z = 0.864$ at $p = 0.445$) and does not differ significantly between men and women (Tab. 2) (Potonska, 2020).

Table 2

Descriptive sampling statistics NTN questionnaire of Kornilov T.V.

	Whole sample (N=130)	Women (N=71)	Men (N=59)
Tolerance to uncertainty	56,64±5,11	56,82±5,90	56,43±4,00
Intolerance	64,95±8,06	65,10±8,14	64,76±8,03
Interpersonal intolerance	36,33±6,36	35,56±6,57	37,26±6,03
Stereotyping Index	1,16±0,18	1,16±0,188	1,16±0,176

Manifestations of stereotyping in the emotional sphere. We paid attention to the anxiety, which has the greatest involvement in the issue of fears among the emotional life components.

The State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, Vagg & Jacobs, 1983) is the best known instrument for assessment of the anxiety symptoms severity in adults and adolescents.

It is based on differentiating between different types of anxiety: a) as a situationally conditioned state (SA-situational anxiety) - temporary emotional reaction to situations that pose some threat to the individual and are subjectively significant; b) as a stable personality trait (OT - trait anxiety) - the tendency to perceive a wide range of typical life situations as threatening and to feel a corresponding state of anxiety (McDowell, 2006).

The anxiety as a trait is not observed on an hourly basis, but becomes prominent when stressors are acted upon - on selected important and personally significant occasions. **We consider this trait as a manifestation of stereotyping in the emotional sphere, which may be due to experiences of childhood fears.**

The STAI has proved validity and high internal consistency, with retest reliability of 0.16-0.54 for the Situational Anxiety Scale and 0.73-0.86 for the Personality Anxiety Scale (McDowell, 2006). Thus, SA scores remain relatively stable over time, whereas OT scores change, increasing in response to stress and decreasing as a result of relaxation training, social psychological help and other supportive factors. Nevertheless, the two scores are highly correlated and can be seen as a single factor (McDowell, 2006, pp. 319-327).

In our data, the normative SA score was 41.51 ± 8.39 , with a minimum and maximum in the sample of 29-75, respectively; on the OT scale the normative scores were 46.13 ± 5.77 , with a range of 34-60. These results differ both from the normative

Khanin J.L. and from data previously published by American colleagues (Table 4) (Khanin, 1976, 1991).

Table 3

Normative data for STAI scales in different samples

	Sample of Ukrainians adults (by the author)		American sample (based on data from Spielberger Ch., 1983).	
	men, N=59	women, N=71	men	women
SA: situational anxiety	41,38±7,72	41,63±8,96	35,7±10,4	35,2±10,6
OT: Personality anxiety	46,08±5,40	46,17±6,11	34,9±9,2	34,8±9,2

Note: The standards for the methodology are published in Handbook I. McDowell (2006).

The results of the study indicate the elevated level of situational and personality anxiety in the sample. The empirical division of the ST Scale does not correspond to the characteristics of the normal distribution: it has a sharp top and is significantly shifted to the right ($Z = 1.78$ with $p = 0.004$; kurtosis 2.84, asymmetry 1.35).

The results lead to the assumption that average levels of anxiety and worry have increased significantly over the past 35 years (this requires more extensive research in different age and socio-cultural groups). In addition, the high rates could be explained by emotional tension and stress during the COVID-19 pandemic in Ukraine.

The manifestations of stereotyping in the cognitive sphere manifest themselves in the presence of stable attitudes and beliefs that are detrimental to normal adaptation. This issue is being actively developed in the cognitive therapy approach, so we used two tools from this practice.

The Personality Belief Questionnaire - Borderline Personality Disorder (PBQ-BPD; Butler A., Brown G., Beck A., Grisham J., 2002) is based on the cognitive theory of Beck A. The cognitive theory of Beck A., which explains the influence of cognitive patterns (schemas, attitudes, errors) on the occurrence and treatment of psychological disorders. The cognitive style is a way of thinking, processing information, interacting with the environment and determines subjective interpretation of events and corresponding emotional and behavioral responses (Beck, 1998). The personality disorders are explained by the specific content of dysfunctional beliefs, are formed predominantly in early childhood and lead to systemic errors. For example, people with OCD hold the beliefs "Flaws and mistakes are unacceptable", "You have to achieve perfection in everything you do", "Details are very important", and the like. The combination of biased information processing and negative perceptions of oneself, others and the world at large leads to negative consequences in almost all contexts: generates emotional reactions, affects motivation, and activates maladaptive behavioral strategies (Konina, Kholmogorova, 2016).

Konina, M.A. and Holmogorova, A.B. (2016) presented an adapted version of the PBQ-BPD as an independent screening questionnaire.

The sample statistics with clinical and normal population data are shown in Table 4. The mean scores of the study sample are intermediate between clinical and

population data. The men had more pronounced tendencies to distrust in interpersonal relations, with a mean of 8.32 compared to 6.37 for women (significance of the difference, tested by Student's t-point consists of 3.498 at $p < 0.001$).

Table 4

Normative data from the PBQ-BPD Dysfunctional Beliefs Questionnaire in different samples

	Adult sample, 130 people	Data from previous researchers:	
		Clinical group (N = 37)	Population group (N = 30)
Distrust (points 10-14)	7,25±3,31	8,89±4,49	6,13±1,83
Dependence (points 4-7)	3,30±2,39	5,70±3,78	2,63±2,02
Protection (items 1-3, 8, 9)	4,03±2,59	5,27±3,39	3,33±2,20
Total score	14,58±6,40	19,86±9,12	12,10±4,31

Note: Clinical and population group norms are provided in accordance with the data of Beniashvilia K.E. and Kholmogorova A.B. (2016).

The SPB (Survey of Personal Beliefs) questionnaire has been developed by Kassinove H. and Berger A. in 1984 in accordance with the rational-emotional therapy provisions (Demaria, Kassinove, Dill, 1989). In accordance with the theory of Ellis A., the negative emotions are not the results of real events, but are negatively interpreted through irrational beliefs learned in childhood and during life. These are dogmatic, rigid, categorical and unconditional ideas about 'how things should be': that people should do everything well and get approval from others (otherwise they are bad), that people around them should treat them carefully and understandably (otherwise they are bad). By following such false beliefs, the individual consciously or unconsciously chooses the imperative notions of 'should' and 'must'. Since they cannot be embodied, this creates emotional problems and causes the psychological distress (Ellis, Dryden, 2002).

The Russian-language version of the SPB was published by Kovpak D. V. and Kamenyukin A.G. in 2004 and was disseminated as the "Ellis test" (Kamenyukin, Kovpak, 2008). We used a modified version of the technique in the study with a simplified assessment scale, from a three-point scale.

The average trends and measures of variation in the irrational personal beliefs indicators are provided in Table 5. Some of the parameters in our sample do not conform to the characteristics of a normal distribution: on the "Catastrophizing" and "Responsibility for Onself" Scales, over 55% of those surveyed scored in the narrow 7-8 range; on the "Responsibility for Others" Scale, the histogram has two prominent peaks shifted to the right. We suppose that the three-point rating system has reduced in some way the psychometric accuracy of the methodology and resulted in biased distribution, so we recommend the use of the original 6-point Lickert Scale.

Correlation analysis. The Pearson's Correlation Coefficient allowed us to analyze linear dependences between the diagnosed parameters of childhood and adult fears, manifestations of stereotypes in various spheres.

Table 5

Descriptive statistics from the Personal Beliefs Questionnaire (SPB, Kassiove H., Berger A., 1984), modified version

	Average, M	Standard deviation SD	Median, Me	Excess, Exc.	Asymmetry, Ass.	Interval (Min - Max)	Compliance with a normal distribution	
							Kolmogorov-Smirnov Z-criterion	Significance
Catastrophization	6,79	1,27	7	1,06	-0,85	2,5–10	2,07	0,000
Responsibility for Onself	7,16	1,09	7	1,82	-0,89	3,5–10	2,29	0,000
Responsibility for Others	6,18	1,22	7	0,25	-0,49	3–9	1,60	0,012
Low frustration tolerance	5,58	1,31	5	-0,12	0,08	2,5–9	1,35	0,053
Self-conception	6,12	1,23	7	0,12	0,12	2,5–10	1,07	0,204
Irrational attitudes	31,83	4,19	31,5	0,27	-0,36	19–41	1,22	0,100

The Table 6 contains the part of the correlation matrix, which demonstrates the relationship between the indicators of childhood fear expression and manifestations of stereotyping.

Table 6

Pearson's Correlation Coefficient Calculation

	Childhood fears	Adult fears	General severity of fears	Number of fears	Power of fear	Phobic component	Destructive fears	Constructive social fears
Actual rigidity	0,12	0,138	0,143	0,129	0,05	0,128	0,194	-0,04
Uncertainty Tolerance for Multiple Types of MSTAT-I Incentives								
Acceptance of novelty	-0,20	-0,22	-0,23	-0,23	0,005	-0,18	-0,31	0,042
Acceptance of complexity	-0,13	-0,06	-0,13	-0,18	0,084	-0,04	-0,27	0,119
Accepting uncertainty	-0,15	0,032	-0,11	-0,20	0,174	0,015	-0,24	0,062
Total TN score	-0,18	-0,06	-0,16	-0,22	0,117	-0,06	-0,30	0,086
New questionnaire of tolerance to uncertainty NTN								
Tolerance to uncertainty	0,044	-0,06	0,025	0,02	0,069	0,026	-0,11	0,242
Intolerance	-0,16	-0,27	-0,21	-0,14	-0,34	-0,25	-0,09	-0,22
Interlich. intolerance	0,208	0,248	0,242	0,206	0,115	0,23	0,154	0,190
Stereotyping Index	-0,17	-0,18	-0,19	-0,14	-0,30	-0,21	-0,02	-0,32
Dysfunctional Beliefs Questionnaire PBQ-BPD								
Mistrust	0,339	0,414	0,399	0,378	0,169	0,334	0,391	0,06
Addiction	0,234	0,417	0,312	0,208	0,31	0,365	0,206	0,172
Protection	0,093	0,424	0,200	0,059	0,302	0,323	0,055	0,103
Overall BPD score	0,301	0,544	0,404	0,298	0,325	0,440	0,301	0,138
SPB Personal Belief Examination								

Catastrophization	-0,01	0,049	0,015	-0,01	0,012	0,043	-0,06	0,046
Obligation towards oneself	0,16	0,057	0,138	0,103	0,011	0,148	0,072	0,321
Obligation towards others	0,122	0,19	0,164	0,157	-0,01	0,135	0,108	0,081
Low frustration tolerance	0,268	0,069	0,246	0,242	0,046	0,194	0,230	0,231
Self- conception	0,228	0,065	0,197	0,231	-0,05	0,113	0,279	0,021
Irrational attitudes	0,225	0,126	0,225	0,212	0,006	0,190	0,184	0,202
STAI Anxiety and Anxiety Scales								
Situational anxiety	0,338	0,559	0,443	0,290	0,462	0,524	0,315	0,214
Personal anxiety	0,372	0,485	0,455	0,356	0,342	0,470	0,319	0,317

Significant coefficients are highlighted in grey ($p \leq 0.05$) and in bold ($p \leq 0.01$).

Analysis of the coefficients in Table 5 contains the genus of significant relationships:

1. Expression of fears is closely related to the formation of stereotypes in the emotional sphere - reactions of anxiety and restlessness in response to a wide range of life situations. This aspect revealed the strongest direct correlations at the level of $p \leq 0.001$. The particularly influential parameter of fear in this case is the phobic component - compulsive reactions that have a continuation into adulthood.

2. Expression of conditioned fear correlated positively with the assessment of the TNT Questionnaire's tolerance for uncertainty ($p \leq 0.01$). The tolerance to ambiguous situations can underlie fear - due to sensitivity to inconsistency of one's own behavior and personal characteristics with social expectations. The fear of social inappropriateness provokes greater responsibility towards oneself ($p \leq 0.001$). This indicates a fundamentally different adaptive function of fears that are socially conditioned in nature.

3. Both constructive and destructive fears are positively correlated with intolerance in interpersonal relationships - intolerance of situations of uncertainty, a desire for clarity and control in relationships with others. The most important contributor to these relationships is the phobic component and the continuation of fears in adulthood.

Discussion

All the identified patterns confirm that childhood fears cause stereotyping in the perception of reality, in thinking, in emotions and behavioral reactions. In adulthood, this becomes the reason for many psychological problems. The fear expression parameters in childhood and adulthood have significant negative correlations with the "intolerance" index of the TNT questionnaire, and the integral index of stereotypy decreases accordingly. I mean, people who are prone to intolerant experience fewer and stronger reactions of fear. This is an unexpected result that contradicts the proposed study hypothesis - the influence of childhood fears on adult stereotyping. Moreover, these relationships are paradoxical in relation to the other results of the correlation analysis. We will seek an explanation for these results in the next stages of data analysis.

It will be observed that the similar indicators of the three instruments designed to measure the level of stereotyping (TOR of Zalewski G.V., MSTAT-I of McLane D. and

TNT of Kornilova T.V.) contains the correlations not only of different significance, but even of different directions. Its means that the TN questionnaires used in the study diagnose different aspects of mental reality.

Conclusion

Through six standardized self-report questionnaires, we obtained 20 quantitative indicators which reflect the wide range of possible effects of childhood fears and stereotypes manifestation in different spheres of mental life (cognitive, emotional, behavioral, interpersonal).

The results of the correlation analysis revealed the negative impact of childhood fears, which shows the personality stereotyping: perception, thinking, emotions, behavioral reactions. At the same time, social origin fears (not complying with the expectations of others) are interrelated to the tolerance for uncertainty; they form higher demands on the self, reduce self-acceptance and contribute to the formation of co-dependent behaviors. The expression of fears of any nature negatively affects the psychological well-being of the adult and causes a range of psychological problems and even pathopsychological disorders.

The validity of the diagnostic data obtained was verified using the control "truth scale" inserted into the questionnaire to determine the actual rigidity (diagnoses the propensity to give socially desirable answers), as well as the "psychoticism" scale of the SCL-90-R questionnaire.

Further research prospects. The described results reveal previously unknown latent regularities, which are of practical and theoretical interest for further research: valuable information about the influence of fears of different nature on the formation of personality, the adaptive function of fear in tolerance to uncertainty.

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