

## Hardiness and Purposes in Life of Modern Russian Students

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**Abstract:** The article reviews the results of study of hardiness and purposes in life of modern Russian students of a humanities higher school. The methodological procedures are based on the hardiness concept by S. Maddi. The purposes in life of the students have been studied using content analysis. It has been found that more hardy students, contrary to less hardy ones, are characterized with higher self-efficacy and lower level of anxiety; student with higher hardiness, self-efficacy and lower anxiety have higher results of Unified State Exams (USE); students with decreased hardiness are characterized with uncertainty in success, aiming at change of place of residence, rigid aiming at career to the prejudice of other living environment, or inability to select between aiming either at family or at career, these aims being interpreted as competing ones; inclination to postpone for the future the understanding of own experience and its transfer to other people.

**Key words:** Hardiness • Self-efficacy • Anxiety • Purposes in life

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### INTRODUCTION

During deep transformations of Russian reality and overall global changes high requirements are specified with regard to personal hardiness, including personalities of modern students, representatives of new generation, who commence their responsible life.

In the recent 20 years the hardiness is a subject of study of Russian and foreign scientists [1-9]. In these works the hardiness is discussed in terms of the concept by American psychologist S. Maddi [1, 6-8]. As S. Maddi supposes, the hardiness is a belief system about oneself, the outward things and interaction with the world, which prevents occurrence of tension in stressful situation due to steady coping [2]. This is a unique pattern of structure of sets and habits, which facilitates transformation of changes, occurring with a person, into his possibilities [9]. S. Maddi and D. Khoshaba indicate that the hardiness is not an inherited quality. It is formed during overall life and can be corrected [7].

Our study is aimed at revealing of interaction between the hardiness and other peculiar features of personality of students (self-efficacy, anxiety) and results of training activity; at determination of purposes in life of students, searching for interaction between the hardiness and purposes in life of students.

### MATERIALS AND METHODS

**Participants in the Study:** The study was performed in Sholokhov Moscow State University for the Humanities. Total sample of tested was 547 persons: students of full-time departments of the faculties of journalism, design, psychology, ecology, philology, jurisdiction and history. Essays of 54 tested persons were examined by content analysis. The average age of the tested persons was 18.9.

**Procedures:** In order to diagnose hardiness and other personality traits of the students (self-efficacy, trait and state anxiety) the following procedures were used: Hardiness Survey by S. Maddi, adapted by D.A. Leontiev, E. I. Rasskazova [2]; self-efficacy scale by R. Schwarzer, M. Jerusalem, adapted by V. Romek; procedure of measurement of anxiety level by J. Taylor; diagnostics of self-assessment of anxiety by Ch. D. Spielberger, Yu. L. Hanin.

Efficiency of training activity was determined by average USE grade and average grade after winter exams.

The purposes in life of the students were revealed on the basis of content analysis of their essays, Hero's Way, in terms of 44 criteria, divided by us into three groups: 1) criteria reflecting specific nature of the predetermined

goals, activity aimed at their implementation and their affective estimation (statement of purpose oriented at approval; statement of purpose in the sense of avoidance of failure and its consequences, statement of purpose oriented at success, achievement; hope for approval; positive emotions regarding approval; mentioning of impossibility to plan for future and absence of purposes; mentioning of right choice of way; doubts concerning successful circumstances; hope for success etc.); 2) criteria reflecting demands of the tested persons (confession, reputation, friendship, independence, respect, care about others, search for support, acquisition, increase in welfare, cognition and self-training, labor and creative work, marriage, birth, alteration of place of residence); 3) criteria facilitating estimation of commitment of the tested persons to family and/or career (rigid orientation at creation of only family or only career; orientation at creation of family and career with focus on family or on career; statement of willingness to combine creation of family and establishment of career). According to the instruction the students were proposed to imagine themselves 40 years later and to describe their life journey. Essays consisting of more than 250 words were selected for the content analysis. In order to determine the degree of indicators, which were revealed within the content analysis, the method by Gottschalk and Glezer was applied [10], allowing for rank correlations. All results were processed using correlation and factor analysis (SPSS package for Windows).

## **RESULTS AND DISCUSSION**

According to the obtained results, hardiness is in close correlation with self-efficacy ( $r = 0.65$ ,  $p < 0.001$ ). This confirms previous results of other authors [5]. Therefore, more hardy students in comparison with less hardy ones have higher level of self-efficacy, that is, they demonstrate higher confidence in their abilities to arrange and to implement their own activity aimed at achievement of target.

Negative correlations were detected between hardiness and anxiety by Taylor scale ( $r = -0.593$ ,  $p < 0.001$ ) and indicators of trait and state anxiety by Spielberger and Hanin test ( $r = -0.43$ ,  $p < 0.01$ ; and  $r = -0.6$ ,  $p < 0.001$ , respectively). Therefore, more hardy students demonstrate lower level of both trait and state anxiety. Less hardy students have high trait and state anxiety, which is a sign of their emotional ill-being.

The indicator of self-efficacy correlates with the indicators of trait anxiety by the Taylor scale and Spielberger-Hanin test with opposite sign ( $r = -0.34$ ,  $p < 0.05$ ;  $r = -0.39$ ,  $p < 0.05$ , respectively). This means that more anxious tested persons are characterized with lower self-efficacy in comparison with less anxious ones.

Interrelations between USE grades and self-efficacy of the students were determined ( $r = 0.397$ ,  $p < 0.05$ ). Therefore, the students with higher self-efficacy have higher USE results. In addition, average USE grade negatively correlates with anxiety by the Taylor scale ( $r = -0.342$ ,  $p < 0.05$ ). Hence, less anxious students have higher USE grades in comparison with more anxious ones.

Based on factor analysis (Varimax method) 14 factors were determined (86% of overall dispersion). We classified 4 factors as the most significant: 1) Uncertainty, 2) Indicators of success, 3) Assessment of possible risks and 4) Indicators of hardiness.

According to the subject matter the most important for us is the factor Indicator of Hardiness. Analysis of variables of this factor revealed that decreased hardiness (weight: -0.688) is peculiar for the tested persons with high trait and state anxiety by the Spielberger--Hanin test (0.896 and 0.731, respectively), high anxiety by Taylor (0.872), low self-efficacy (-0.416) and low USE grades (-0.208). In addition, the tested persons with decreased hardiness are characterized with rigid orientation at career at the expense of other living environments (0.296), or impossibility to determine orientation either at family or career, which are interpreted as competing targets (0.353). Less hardy tested persons declare about uncertainty in success (-0.339) and are oriented at alteration of place of residence to a higher extent than more hardy persons (0.307). In addition, they are inclined to postpone for the future the understanding of own experience and its transfer to other people (0.281).

The Uncertainty factor combined various variants of lack of self-confidence: demand for support (0.840), declaration about significance of target (0.635) and activity oriented at approval (0.834) and hope for its obtaining (0.828), avoidance of failure (0.718) or unwillingness to act due to possible failure (0.448), emphasizing of probability of risk (0.381), deliberately rigid orientation only at career (0.683) or at family (0.570), direct declaration about incorrectness of selected way (0.570). The Uncertainty factor also includes the indicator of hardiness with opposite sign (-0.120). Therefore, less hardy tested persons are characterized with manifestation of uncertainty (at the level of trend).

Analysis of variables, included in the Indicators of success, reveals the following signs of success in life: birth of children (0.835), increase in welfare (0.763), marriage (0.685), care about close ones (0.677), possibility to share life experience (0.662), orientation at creation of career and family with focus on family (0.643), alteration of place of residence (0.524). The tested persons, more oriented at the aforementioned indicators of success, are characterized with distinct formulation of future targets and understanding of the ways of their achievement (0.608 and 0.526, respectively).

Analysis of the Assessment of possible risks shows that the tested persons in the case of more probable risk are characterized with unwillingness to exercise failure (0.809) and its consequences (0.606), with declaration of doubts about successful circumstance (0.561) and refer to external circumstances in the case of failure (0.712). At this, they are persistent in their hopes for success (0.623) and readiness to show persistence in the case of failure (0.398), they seek for independence (0.726) and emphasize that they take pleasure in targeted activities (0.708) and are oriented at establishment of career and family with focus on career (0.429). In addition, the tested persons, forecasting failure, are characterized with increased state anxiety (0.343) and low self-efficacy at the level of trend (-0.173).

## CONCLUSIONS

- More hardy students are more self-efficient and demonstrate lower level of both trait and state anxiety, which is a sign of their emotional well-being.
- Students with higher self-efficacy and lower anxiety have higher USE grades.
- Decreased hardiness is characteristic for students with high anxiety, low self-efficacy and low USE grades.
- The tested persons with decreased hardiness are characterized with rigid orientation at career at the expense of other living environments or impossibility to select between orientation at family or at career, which are interpreted as competing targets; uncertainty in success, orientation at alteration of place of residence, inclination to postpone for the future the understanding of own experience and its transfer to other people.
- Less hardy students are inclined to exhibit uncertainty in themselves, they declare about significance of target and activity oriented at approval and hope for its reception, they avoid

failure or declare unwillingness to act due to possible failure, they highlight probability of risk, demonstrate deliberately rigid orientation either at career or at family only, they directly state about incorrectness of selected way and are less hardy.

- Among the signs of success in life the students mention the following: birth of children, increase in welfare, marriage, care about close ones, possibility to share life experience, orientation at creation of career and family with focus on family, alteration of place of residence.
- The students oriented at success are characterized with proper formulation of future targets and understanding of the ways of their achievement.
- Less efficient students with higher anxiety are inclined to forecast higher probability of risk, unwillingness to exercise failure and its consequences, to declare doubts about successful circumstance and refer to external circumstances in the case of failure, they are characterized with increased state anxiety and low self-efficacy. At this, they are persistent in their hopes for success and readiness to show persistence in the case of failure, they seek for independence and emphasize that they take pleasure in targeted activities and are oriented at establishment of career and family with focus on career.

## REFERENCES

1. Maddi, S., 2002. The story of Hardiness: 20 Years of Theorizing, Research and Practice. Consulting Psychology Journal, 54: 173-185.
2. Leontiev, D.A. and E.I. Rasskazova, 2006. Test of Hardiness. Moscow, Smysl, pp: 63.
3. Golby, J. and M. Sheard, 2004. Mental Toughness and Hardiness at Different Levels of Rugby League. Personality and Individual Differences, 37: 933-942.
4. Lee, H.J., 1991. Relationship of Hardiness and Current Life Events to Perceived Health in Rural Adults, Research in Nursing and Health, 14(15): 351-359.
5. Gordeeva, T.O., E.N. Osin and V. Yu. Shevyakhova, 2009. Diagnostics of Optimism as a Style of Explanation of Successes and Failures: STOUN Questionnaire. Moscow, Smysl, pp: 152.
6. Maddi, S.R. and R.H. Harvey, 2005. Hardiness Considered Across Cultures. Handbook of Multicultural Perspectives on Stress and Coping / P.T.P. Wong, L.S.J. Wong (Eds.). New York: Springer, pp: 403-420.

7. Maddi, S. and D. Khoshaba, 2004. *HardiTraining. Managing Stress for Performance and Health Enhancement*. Irvine: The Hardiness Institute.
8. Maddi, S., R. Harvey, D. Khoshaba and M. Fazel, 2012. The Relationship of Hardiness and Some Other Relevant Variables to College Performance. *Journal of Humanistic Psychology*, 52 April 1: 190-205.
9. Aleksandrova, L.A., 2004. On the Concept of Hardiness in Psychology. *Siberian Psychology Today. Proceedings. Issue 2*. Edited by Gorbatova M. M., A.V. Serova, M.S. Yanitsky. Kemerovo, Kuzbassvuzizdat, pp: 82-90.
10. Gottschalk, L.A. and G.C. Glezer, 1969. *The Measurement of Psychological States through the Content Analysis of Verbal Behavior*. Berkeley: University of California Press, pp: 228.