A phenomenon of hardiness as an integral feature of personal potential

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Abstract:

The paper is devoted to the study of the phenomenon of hardiness as an integral characteristic of teacher potential. The topicality of this problem is determined by the fact that in the process of socialization and personal development, each person faces the need to overcome certain life difficulties: psychological crises, stressful situations, the effects of external social negative factors, and many others. Moreover, due to specific features of psychic processes, an individual always strives to overcome difficulties in the most effective and least burdensome way. Not only the psychological well-being of a person, but also the harmonious existence of the whole society depends on the choice of one or another method of coping behavior (constructive or destructive). The paper presents the results of a study of the interrelationship between the level of subjective control, the spheres of motivation and needs, values and meaning of a person’s personality and the development level of a person’s hardiness. The paper contains the results of the theoretical and methodological analysis of domestic and foreign literature on the research topic; the results of a comprehensive diagnosis of the level of hardiness development of a person and hardiness in different life situations; specific features of subjective control, the spheres of motivation and needs, values and meaning of an individual’s personality and their relationship with the hardiness development level. It has been proved that people with different levels of
hardiness have: different levels of subjective control (in people with a high level of hardiness, the level of subjective control is higher); a different value and meaning frame of an individual’s personality (hierarchy and structure of teacher values and meanings depends on the level of hardiness); different levels of positive and negative motivation (motivation for success and motivation for failure). The conclusions have been drawn that hardiness has its own structure and turns out to be a key personality variable, mediating the influence of external (stressful) factors on a person, as well as on the success of activity.

**Keywords:** hardiness, coping behavior, teacher potential, subjective control, sphere of motivation and needs, sphere of values and meaning.

**Introduction**

The conditions under which the life activity of a contemporary person takes place cannot but affect the state of his health, maintaining which largely depends on the person’s ability to build his life in an effective way - the ability to be hardy. Hardiness as a person’s ability to return to a normal state after various shocks is not a fixed quality, but a dynamic process acting differently at different stages of a person’s life (Burelomova, Gulina & Tikhomandritskaya, 2018). In psychological science, hardiness is considered as one of the aspects of teacher potential and is explored with respect to certain risks, although attempts are made to find universal factors of hardiness. The subject field of the study is personality constructs and characteristics that help a person cope with difficult life situations: coping strategies, adaptive abilities, teacher potential, etc.

It should be noted that in the process of socialization and teacher development, each person is faced with the need to overcome certain life difficulties: age-related psychological crises, stressful situations, and the effects of external negative factors (Nartova-Bochaver et al., 2018). Moreover, due to specific features of psychic processes, an individual always strives to overcome difficulties in the most effective and least burdensome way.

In the current situation of the development of society, the problem of coping with difficult life situations has become particularly important. This is primarily due to the fact that not only the psychological well-being of a person, but also the harmonious existence of the whole society depends on the choice of a particular method of coping behavior (constructive or destructive one) (Zabelina & Fortunato, 2019).

In foreign psychology, the concept of “hardiness” was introduced by S. Maddi (2005). From the point of view of this author, hardiness as a concept reflects the psychological vitality and enhanced effectiveness of a person. Hardiness is not only an indicator, but also a general measure of a person’s mental health.

In domestic literature, the psychological characteristics of hardiness are analyzed when considering the problems of life path psychology, in the context of studying the problems of the meaning of human life, in identifying the personal in the personality in the process of exploring teacher potential as the basis for self-determination, in considering and analyzing the features of the phased development of personality self-awareness ties. For example, from the point of view of S.L. Rubinstein (1973), the meaning of life is a self-determining and self-regulating ability for a person. The meaning of life is the basic structure of the psychic regulation of the person’s life path and forms the orientation of meaning in the individual trajectory of the person’s life path development. The loss of the life meaning leads to fatal changes and deformation of personal development. S.L. Rubinstein (1976) writes that “only external determination entails internal emptiness, lack of resistance, selectivity in respect to external influences, or simple adaptation to them. The presence of the meaning of life is a factor that mobilizes the internal forces of the person and increases its hardiness”.

From the point of view of D.A. Leontiev (1977) D.A. Leontiev and E.I. Rasskazova, (2006), teacher potential is an integral characteristic in evaluating the level of personal maturity, which measures the ability of a person to overcome certain circumstances and which is expressed in the characteristics of personal hardiness.
Thus, in order to explore a person’s hardiness, it is necessary to study his personality characteristics. In this regard, the purpose of the presented study was to investigate the interrelation between the level of subjective control, the sphere of motivation and values of a person and the level of hardiness of the individual. Personality factors served as the object of the study that have an effect on the level of a person’s hardiness in difficult life situations. The subject of the study included the features of the manifestation of hardiness in difficult life situations. To achieve this goal, we have carried out the following tasks: a theoretical analysis of scientific literature on the topic of this study; comprehensive diagnostics of hardiness; the study of hardiness in different life situations; the study of the values and motivation sphere of respondents; a qualitative and quantitative analysis of data in the samples to confirm the hypothesis of the study (Menshikova et al., 2018; Erofeeva, 2019a; Telysheva et al., 2019; Goloshumova et al., 2019; Romanova et al., 2019; Lekareva et al., 2018; Grinenko et al., 2019).

Literature Review

The category of “hardiness” introduced by D. Khoshaba and S. Maddi (1999), is at the intersection of the theoretical views of existential psychology and the applied field of stress psychology and coping with it. The applied aspect of hardiness is determined by the role that this personality variable plays in successful counteracting stressful situations. According to D. Khoshaba and S. Maddi (1999), hardiness is a key personality variable that mediates the influence of stress factors on somatic and mental health, as well as on the success of activity.

In psychoanalyst D. Coutaille’s (2007) opinion, hardiness is a combination of three main qualities that distinguish people who can quickly adapt, among the others: the ability to accept reality as it is; to find the meaning of life in difficult life situations; outstanding ingenuity. The presence of one of two qualities allows a person to cope with difficult situations, but resistance to stressful influences and constructive ways of coping with difficulties are formed only owing to three components. Thus, hardiness of the subject combines the levels of being (biological, psychological and social) and the totality of personal qualities of the individual allows him to find the most optimal ways of responding to environmental influences.

The most accurate definition of hardiness was given by American psychologist S. Maddi (2005), the creator of the concept of hardiness. In his opinion, hardiness is a system of beliefs about oneself, about the world, about relations with the world (Kondratyeva, 2011). This is a disposition that includes three relatively autonomous components: commitment; control; challenge. “Commitment” is defined as “the belief that involvement in what is happening gives the maximum chance to find something worthwhile and interesting for the individual” (Maddi, 2005). “Control” is the belief that the struggle allows one to influence the outcome of what is happening, even if this influence is not absolute and success is not guaranteed. “Challenge” is a person’s persuasion that everything that happens to him contributes to his development through knowledge derived from experience - it does not matter, whether it is positive or negative.

In foreign psychology, the following terms are used to determine the specifics of a person’s behavior in difficult situations - “coping” (“to cope” with something, for example, a problem situation) and “defense” (for example, from unpleasant experiences, thoughts or from facts threatening to undermine a person’s positive self-esteem). The term “coping” was introduced in the 30s of the 20th century by G. Hartmann (1958) in connection with the need to describe the functioning mechanisms of the so-called “conflict-free ‘I’-zone”. In the 40s and 60s of the 20th century, the concept of coping began to be actively used in the study of stress mechanisms, as well as in connection with the development of effective methods for treating stress conditions caused by serious illnesses (Lazarus, 1991; Lazarus & Folkman, 1984; Topolansky & Strukovskaya, 2015).

Analyzing various ways of resolving psychological problems, domestic psychologists say about “defense” (Zachepitsky & Yakovleva, 1960), “overcoming” the state of tension and “stopping” stress (Bodrov, 2006). It is also spoken about “maladaptation” and “adaptation” to social conditions (Nalchadzhyan, 1988), to experimental conditions of life and activity (Lebedev, 1979), to unusual
conditions of existence (Kuznetsov & Lebedev, 1972). In connection with coping, “struggle” with life difficulties, “overcoming critical situations” (Vasilyuk, 1984) is also mentioned. However, more and more often, researchers use the term “coping” and “to cope” (Kocharyan & Kocharyan, 1994; Antsyferova, 1993; Libina, 2008).

Thus, coping behavior or coping is a purposeful social behavior that allows the subject to cope with a difficult life situation (or stress) in ways that are adequate to personal characteristics and the situation - through awareness of action strategies. This conscious behavior is directed at changing, transforming a situation that can be controlled, or at adapting to it if the situation cannot be controlled (Erofeeva et al., 2019c; Shukshina et al., 2017; Mitin et al., 2017; Vasyakin et al., 2018; Agadzhanova & Salakhova, 2018; Kornilova, Chumakova & Krasavtseva, 2018; Efimova et al., 2019).

Research Methodology

To accomplish the objectives set, a number of research methods was used: the study and theoretical analysis of psychological literature, conversation, testing, generalization, experimental data processing methods. The methodological basis of the study is the theoretical position in psychology about hardiness and coping strategy of a person’s behavior in difficult life situations (combining human behavior with difficult life situations).

The study was composed of several stages.

1) At the first stage, to identify the level of hardiness, we used S. Maddi’s “Hardiness test” adapted by D.A. Leontiev and E.I. Rasskazova (2006).

2) At the second stage, we studied the hardiness of people in different life situations. At this stage, we used the methodology “Level of subjective control” (hereinafter - LSC) proposed by E.F. Bazhina, E.A. Golynkina and A.M. Etkind (1984).

3) At the third stage, we studied the spheres of values and motivation among the respondents of both groups (the methodology “Value Orientations” by M. Rokeach (1973, 1974); “Motivation for Success and Fear of Failure” by A.A. Rean (2008)).

4) At the fourth stage, the experimental part was completed, an analysis of the results of the study, systematization and interpretation of the obtained data was carried out.

A sample of the study was represented by 500 students from The Kosygin State University of Russia, Sechenov First Moscow State Medical University, Psychological Institute of Russian Academy of Education, Institute of Culture and Art and Moscow Economic Institute

Aged from 18 to 22 (50% of girls and 50% of boys). Each study participant was asked to fill out a number of tests to identify the level of hardiness, the manifestation of hardiness in different life situations, as well as test material aimed at studying the values and motivation sphere of a person.

Results and Discussion

At the first stage of the study, the hardiness test of S. Maddi (2005) was conducted. Hardiness of the respondents was determined by the following criteria: commitment, control and challenge. The sum of the points according to these criteria gave a total score of the level of hardiness.
According to the results of the study, we identified two groups: the first group is “hardy” - 58.6% of the total number of the sample, the second group is “not hardy” - 41.4%. The mean value of hardness in the sample in the first group is 96.73 (the level of hardness is above average), and in the second group is 71.5 (a low level of hardness), which confirms the correctness of the group distribution.

In the second stage, we studied students’ hardness in different life situations. At this stage, the following subscales were analyzed: general internality (Ig), control in achievement situations (Ia), in situations of failure (If), in the field of production (Ip), interpersonal (Ip) and family relations (Ifam), in the field of health (Ih), the total score equivalent (Ts).

First, we found a total indicator for all subscales of two groups of the sample.

Based on the results of the study, it was found that in the group of “hardy”, the mean value of the total score in the sample was higher (35.85) than the value of the sample means in the group of “not hardy” (27.6). The difference in the sample mean of two sample groups is 4.25.

Thus, we can conclude that the “hardy” have a level of subjective control above the average. They have a high level of responsibility and control both for their own actions and deeds, and for the actions of people depending on them. “Not hardy” have an average level of development of subjective control.

Next, we made a comparative analysis of the LSC of two sample groups according to the indicators of the above subscales, which helped us to identify significant differences between the groups of “hardy” and “not hardy”.

Thus, as a result of a comparative analysis of the LSC of two groups, we found that both groups of respondents have an equal sample mean in the sub-scale of general internality (Ig) of 1.4. This indicator suggests that both the first and second groups of the sample of respondents belong to the internal group.
and exercise internal control over life situations. This means that both groups take on responsibility for the events occurring in their life, explaining them by their behavior, character, abilities. Other subscales (Ia, If, Ip, Ip, Ifam, Ts) clearly show differences with the prevailing point equivalent of the “hardy” group of respondents compared to the second group of “not hardy”. It follows that the respondents of the first group of the sample (hardy) have a high level of subjective control in relation to their successes and achievements (Ia), to negative events and situations (If), to the field of production activity (Ip), to informal interpersonal relations, to their health (Ih), as well as consider themselves responsible for what is happening in their family life.

![Figure 3. Comparative data analysis of the level of subjective control](image)

where
1 - general internality (Ig)
2 - control in achievement situations (Ia)
3 - situations of failure (If)
4 - field of production (Ip)
5 - interpersonal (Ip)
6 - family relations (Ifam)
7 - field of health (Ih)
8 - total score equivalent (Ts)

**Figure 3.** Comparative data analysis of the level of subjective control

To confirm the hypothesis about the difference in the level of subjective control in groups with different levels of hardiness, to assess the significance of differences between the two samples, we used the Wilcoxon – Mann – Whitney U-test.

At this stage of research to identify the significance of differences we found the minimum sum of inversions ($U_{emp}$) which was calculated according to the following formula:
where, \( n_1 \) – numerical value of the first sample,
\( n_2 \) – numerical value of the second sample,
\( R_{\text{max}} \) – the greatest amount of ranks in value,
\( n_x \) – number of subjects in the group with the greater amount of ranks.

Thus, the obtained statistical grade (31.5) is reliable at the 5% level (the level of statistical significance is \( p \leq 0.05 \)), thereby we confirm the hypothesis that hardy people have different levels of subjective control in different situations.

At the third stage, we explored the sphere of values and motivation of the respondents in both groups. In the course of this study, we used the following methods: the technique “Value Orientations” by M. Rokeach (1974), “Motivation for Success and Fear of Failure” by A.A. Rean (2008).

To study the sphere of values, respondents were offered two groups of values, terminal (A) and instrumental (B), followed by their ranking according to the degree of significance. Of the two groups of values ranked by the respondents, we selected the most significant (these are the values that occupy 1,2,3 places) and the most insignificant (these are the values that occupy 16,17,18 places) and obtained the following results.

4.1. Terminal Values

Most of the respondents in this group chose the following values according to their significance: health, financial security in life, love, a happy family life. Thus, in the first place - health, in the second place – financial security, in the third - love and a happy family life. A group of respondents of the “hardy” group value their health, care about material well-being and a happy family life. According to the respondents of this group, the most insignificant terminal values are as follows: the beauty of nature, entertainment, creativity. Thus, they rank in the first place - the beauty of nature and art, in the second - entertainment, in the third - creativity. The “hardy” group does not gravitate to the beauty in nature and in art, they do not consider entertainment important as well as the opportunity to make and create.

4.2. Instrumental Values

According to the results of the study of the sphere of values in the group of “hardy”, the prevalence of the following instrumental values was revealed: conscientiousness and honesty, education, good manners, responsibility, sensitivity and diligence. Thus, conscientiousness and honesty were in the first place, education in the second, in the third – good manners, responsibility, sensitivity and diligence.

The respondents of this group believe that the main means of achieving life goals is the ability to be careful in everything while being honest and sincere with themselves and others. They are confident that much can be achieved by having a high common culture, a large store of knowledge, good manners, a sense of duty, discipline, and being caring and gentle in relation to the world around.

According to the respondents of this group, the most insignificant instrumental values are the following: irreconcilability to shortcomings in oneself and in others, high demands, diligence, rationalism, and broad-mindedness. Consequently, it was found in the first place - irreconcilability to shortcomings in oneself and in others, in the second - high demands, in the third place - rationalism and broad-mindedness.

When achieving their goals, the respondents of the group of “hardy” believe that it is important to have a flexible system of the level of claims, not to pay attention to shortcomings in themselves and in
others, while the ability to make informed and rational decisions is unimportant. Also, the ability to understand and accept someone else’s point of view respects the taste and customs of other people. Based on the results of the ranking of the group of “not hardy”, we made the following conclusions.

4.3. Terminal Values

The majority of respondents in this group consider the following values to be the most significant: health, a happy family life, an active life, life wisdom, love, and financial security. Thus, we found that health was in the first place, a happy family life in the second, an active life, life wisdom, love and financial security in the third place.

In this group they value their health, family happiness, love of a loved one, strive for a full, fulfilling life, due to which life wisdom and financial well-being come. Most respondents of the “not hardy” group consider the following terminal values the most insignificant: the beauty of nature, entertainment, life wisdom, creativity, self-confidence. Thus, we can see that the beauty of nature and art is in the first place, entertainment is in the second, in the third - life wisdom, creativity and self-confidence.

Respondents of this group do not gravitate towards the beauty of nature and art, do not consider entertainment to be valuable, consider it not important to accumulate life wisdom and at the same time be a confident creator.

4.5. Instrumental Values

Most respondents in this group consider the following instrumental values as the most significant: responsibility, diligence, education, strong will, honesty and sensitivity, conscientiousness, good manners and cheerfulness. Thus, according to the majority of the group, the most significant instrumental values are as follows: in the first place - responsibility, in the second - diligence, education, strong will, honesty and sensitivity, in the third – good manners, conscientiousness.

Respondents of the “not hardy” group considered it important for any person to have a sense of duty and ability to keep their word. Discipline, high culture, breadth of knowledge, the ability to insist on one’s own, while being honest, gentle and caring, to have a high spiritual culture and order in everything - by means of these values a person achieves certain results. The most insignificant instrumental values of the group of “not hardy”: high demands, rationalism, cheerfulness, sensitivity, conscientiousness, efficiency in business. The most insignificant instrumental values are as follows: in the first place - high demands and rationalism, in the second - cheerfulness and sensitivity, in the third - conscientiousness and efficiency in business.

This group considers it important to have a flexible system of claims, while it does not consider the ability to think soundly and logically, to make rational decisions, to be caring and have a sense of humor important.
Figure 4. Comparison of the ranks of terminal values in two sample groups by the degree of significance

According to the results of the study, the following conclusions can be drawn: there is a coincidence in the nature of ranking the values according to the degree of significance of two sample groups in the areas of health, material well-being, a happy family life, and love. However, the “hardy” group of respondents has a larger percentage of the distribution of the abovementioned values. In addition, there are values that are of particular importance only in one group of “not hardy” - this is life wisdom and an active life.

Figure 5. Comparison of the ranks of terminal values in two sample groups according to the degree of insignificance

where
1 – Beauty of the Nature and Art
2 – Entertainment
3 – Creativity
4 – Life Wisdom
5 – Self-Confidence
According to the results of the study, we see a coincidence in the ranking of values by the degree of insignificance in the field of beauty of the nature and art, entertainment and creativity. But in the group of “hardy” the percentage of distribution of these values is higher. The values such as life wisdom and self-confidence are considered less significant only in the group of “not hardy”.

![Bar chart comparing ranks of instrumental values in two sample groups by the degree of significance](image)

Figure 6. Comparison of the ranks of instrumental values in two sample groups by the degree of significance

According to the results of the study, we can note the following. There is a tendency for the nature of ranking the values to coincide in the groups of “hardy” and “not hardy”. In this case, the coincidences are the following: conscientiousness, honesty, education and good manners occupy a significant place both in the “hardy” group and in the “not hardy” group. The distribution percentage of these values in the group of “hardy” is higher. The group of “not hardy” has a significant advantage over the values: responsibility and diligence. In addition, diligence and sensitivity occupy a significant place only in the group of “not hardy”.

where

1 – Conscientiousness
2 – Honesty
3 – Responsibility
4 – Education
5 – Good Manners
6 – Diligence
7 – Sensitivity
8 – Strong Will
The Figure clearly shows the differences in the distribution of values. Here we see only a slight coincidence in the ranking by the degree of insignificance of such values as rationalism and high demands with a large percentage distribution of the group “not hardy”. The values such as irreconcilability to shortcomings in oneself and others and rationalism do not have special significance only in the “hardy” group. But sensitivity, cheerfulness, conscientiousness and efficiency in business are not appreciated in the group of “not hardy”.

Thus, according to the results of the study of the sphere of values in both groups of the sample, we revealed the following: in the groups of “hardy” and “not hardy” the distribution of values by the degree of significance coincided, but the percentage of distribution was different. A specific feature was observed in the distribution of values in two groups of respondents. In the group of “hardy”, the distribution of values by the degree of significance is more distinct and structured, i.e. there is no confusion in the degree of significance of the same values. In the group of “not hardy”, a different trend in the distribution of values was observed: the ranking was not distinct, there was a large spread. For example, the terminal value “life wisdom” and the instrumental values “sensitivity” and “conscientiousness” were found in the same percentage, both significant and not significant. This suggests the dynamics of value instability in the group of “not hardy”. Thus, the specificity in the distribution of values was revealed, which confirmed our hypothesis.

To study the sphere of motivation (motivation for success and fear of failure) of the respondents, we used the method “Motivation of success and fear of failure” proposed by A.A. Rean (2008).

According to the results of this study, we can state that in the groups of “hardy” (14.16) and “not hardy” (13.9), the motivation for success was diagnosed with a predominance of the sample mean in the group of “hardy” (0.26).
At the fourth stage, the experimental part was completed, an analysis of the results of the study, systematization and interpretation of the data was carried out.

Conclusion

The analysis of scientific literature showed the topicality of the problem of hardness at the present stage and the need for the formation of hardness (Maddi, 2005; Bozhovich, 1968; Korzhova, 1996; Libina, 2008). An analysis of studies conducted by domestic and foreign psychologists showed that hardness has its own structure (Maddi, 2005; Koutail, 2007) and turns out to be a key personality variable mediating the influence of external (stressful) factors on a person (Maddi, 2005), as well as on the success of activities (Rubenstein, 1976; Abakov & Perret, 2004; Korzhova, 2006).

A theoretical analysis of the scientific literature showed the important role of hardness, namely, its components, in particular, coping skills, in the interaction of a person with a difficult life situation (Lazarus & Folkman, 1984; Topolyansky & Strukovskaya, 2015), where coping behavior is conscious behavior aimed at changing, transforming a situation that can be assessed and controlled, in which styles and strategies are considered as separate elements of conscious social behavior, with which a person copes with difficulties in life (Albukhanova-Slavskaya, 1991, 1999; Korzhova & Butler, 2005; Libina, 2008; Kalina, 2019; Erofeeva et al., 2019b; Efimova et.al., 2019; Salakhova et.al., 2018).

In the experimental part of this work, we carried out a comprehensive diagnosis of a group of respondents for hardness. We tried to determine such personality factors as the level of subjective control, the sphere of motivation and values and the nature of their influence on the level of a person’s hardness.

As a result of the study, our hypotheses have been partially confirmed. Namely, people with different levels of hardness have different levels of subjective control (in people with a high level of hardness, it is much higher); specific features in the ranking of life values, the distribution is more distinct and structured in hardy people.

References


