

Research article

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Hardiness and Time Perception as Personality Resources of Self-regulation

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Abstract

Introduction. Today's world is facing increased uncertainty and new geopolitical risks. In crisis conditions of society development it is necessary to study personal resources of conscious self-regulation among people who are in a difficult life situation. Our study aims to explore the personality resources of conscious self-regulation of people living in the zone of local armed conflict. **Methods.** The sample was 230 people. We used Zimbardo Time Perspective Inventory, Hardiness Survey by S.R. Maddi, Conscious Self-Regulation Profile Questionnaire by V.I. Morosanova, Action Control Scale J. Kuhl, U-Mann-Whitney statistical test, r-Spearman correlation coefficient. **Results.** "Past Negative" time perspective is correlated with low hardiness; Future orientation provides high levels of hardiness and the capacity to project and planning. Action orientation and an ability to realize one's intentions are associated with high hardiness and resilience, future orientation, the ability to be flexible, and to correct the program of actions. **Discussion.** Time perception and hardiness are significant resources of self-regulation that influence its functional, operational-technical and psychological components.

Keywords

hardiness, conscious self-regulation, time perspective, personality resources, action control, past negative, commitment, challenge, planning, future orientation

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Introduction

In today's world there are many challenges, information overload, growing uncertainty. To cope with these challenges, a person needs to be self-organized, independent, flexible and responsible in decision-making. Psychological research focuses on the study of personal and adaptive resources and features of personality transformation in the situation of uncertainty of the environment.

Hardiness and Intentionality

Hardiness is the foundation of an individual's resistance to an uncertainties of the future. Hardiness (Maddi, 2004) is a psychological phenomenon, a person's ability to be open to new experiences, to be involved in current life activities and to act without guarantees of success; to take responsibility and manage situations that are within one's control. A hardy person makes decisions and acts in accordance with one's goals, values, desires, and overcomes environmental resistance.

"Intensity of life experience" is connected with the human ability to act. Rollo May writes about this in his analysis of the will and intentionality (2016). Both will and intentionality are related to a person's determination to act in a certain way. The future becomes an identity-related time through the attitude "I will make it that way". A person finds individuality in intentionality. Intentionality is the ability of the consciousness to have an intention, to be continuously directed towards something. "Constructive" anxiety is related to the awareness of one's capabilities and capacity for action. Expressed fears and anxiety disrupts the connection with the world. Loss of direction, inadequate reactions, lack of "intentionality" are related with "meaningful contents of knowledge or will" (Tillich, 1995, p. 37). Intentionality is the ability to establish connections with the world and to carry out creative activity. Intentionality reveals a person's vitality.

Conscious self-regulation

The problem of self-regulation is actively developed in modern psychology (Banshchikova, Sokolovskii, & Korosteleva, 2022; Morosanova, 2022). "Conscious self-regulation is a controlling meta-resource including universal and special regulatory competencies that provide the conscious setting of goals and managing their achievement" (Morosanova, 2022, p. 1). Regulatory personal properties (autonomy, ability to overcome difficulties, creativity) are predictors in the formation of individual self-regulation style. Conscious self-regulation allows to manage voluntary activity in order to achieve goals (Morosanova, 2022; Konopkin, 2004, 2006; Kadyakina, 2009). Conscious self-regulation determines success in learning new activities and a person's ability to develop themselves and realize their individual potential.

Action control: action orientation and state orientation

Obstacles to the realization of intentions and actions are (Kuhl, 2000): first disposition, action orientation (developed intention, involuntarily performed action without willpower); the second disposition, state orientation (action is hampered by excessive concentration on thoughts and states). Emotion and motivation, attention control (focusing on meaningful information and ignorance of distracting factors); perceptual control, failure control, and behavioral control provide action control (Kuhl, 2000). Will through action control keeps the intention active under favorable conditions and stops the activity under unfavorable conditions (Kormacheva, Dontsov & Mashkova, 2021).

Time perspective

Time perspective is a subjective image of one's life path (Golovaha & Kronik, 2008; Nuttin, 2004).

Time perspective is expressed in life position; lifeline (vector of movement) and life perspective (opportunities for self-realization) (Abulkhanova, 2001), it is a filter that a person looks at the world through (Zimbardo, 2010).

Personality resources in the context of a social crisis

Hardiness, self-regulation, action control and time perspective are significant personal resources that are especially important to study in times of social crisis. Stressfulness, uncertainty, situations of trauma and deprivation can be resources for growth and can "mobilize a person to change the pattern and increase the quality of self-regulation of one's life activity in a compensatory way" (Leontiev, 2016, p. 24), and can be universal resources for self-regulation. Universal resources restructure connections of interaction with the world and allow individual mobilize and adapt to changing environments.

Stress, life losses reorganize the system of self-regulation, activate compensatory mechanisms and provide high quality of self-regulation processes.

Aim and hypotheses of the study

Aim of the research is to study personal resources of self-regulation (time perspective, hardiness, action control) in people who live in the zone of local armed conflict.

Hypotheses of the study:

1. Time perspective, hardiness, action control can be can be resources for self-regulation;
2. Hardiness, time perspective, self-regulation characteristics of action-oriented and state-oriented people will have differences.

Methods

There were 230 people (higher education teachers living in the zone of local armed conflict). The age ranges from 23 to 45 years. The sample consists of 109 men and 121 women.

Research methods:

1. Zimbardo Time Perspective Inventory, ZTPI;
2. Hardiness Survey – Personal Views Survey III-R (2001) – by S.R. Maddi in Russian adaptation by D.A. Leontiev;
3. Self-Regulation Profile Questionnaire – SRPQM – by V.I. Morosanova;
4. Action Control Scale (ACS-90) by J. Kuhl in Russian adaptation by S.A. Shapkin.

We used U-Mann-Whitney statistical test, r-Spearman correlation coefficient to process the results.

Results

Specifics of volitional control

At the first phase of the study, we examined the specifics of volitional control (Action Control Scale (ACS-90) by J. Kuhl).

We categorized the respondents into two groups based on the results:

- Group 1. 51 participants with high scores on the "Action orientation" scale;
- Group 2. 58 respondents with high scores on the "State orientation" scale;
- Group 3. 121 respondents with mid-range values.

We will compare the results of the first and second groups. So, groups with high values on the "Action orientation" scale (hereafter – Group 1, N = 51 people) and "State Orientation" (hereafter – Group 2, N = 58 people).

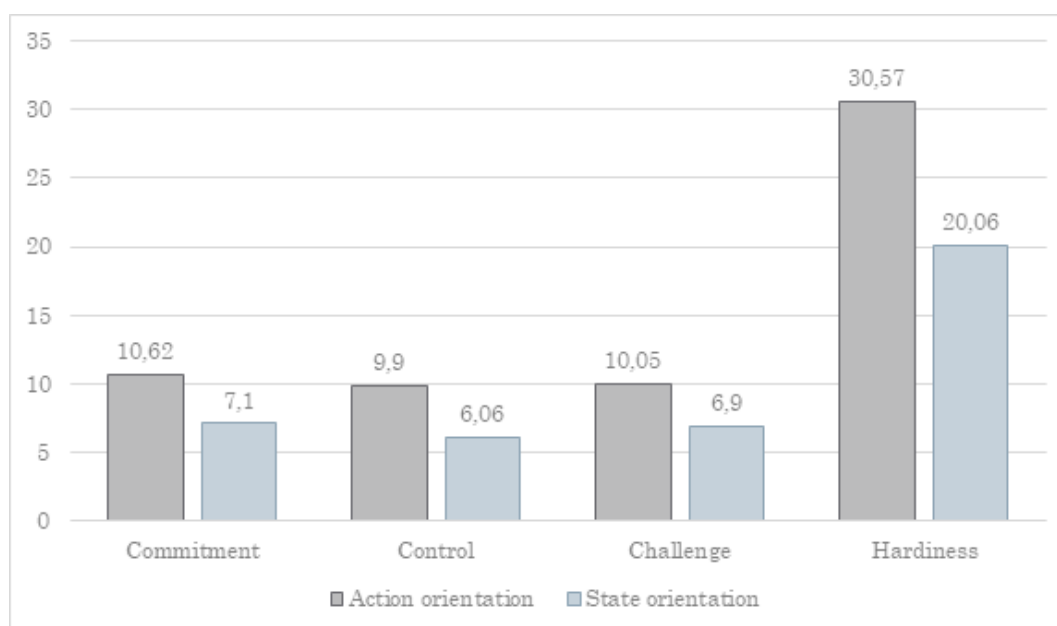
Hardiness

Figure 1 represents the values of respondents in the "Hardiness Survey". Group 1 (action-oriented) compared to Group 2 (state-oriented) has higher values on all scales of the "Hardiness Survey" methodology: "Commitment" (10.62 & 7.10), "Control" (9.9 & 6.06), "Challenge" (10.05 & 6.9) and "Hardiness" (30.57 & 20.06). Differences between groups are statistically significant and tested by the U-Mann-Whitney statistical test.

Action orientation can be associated with the ability: to take risks, to act in terms of unguaranteed results, to be involved in lively activities, to believe in the possibility to influence events and to make conscious decisions.

Figure 1

The results of the study in scores ("Hardiness Survey" by S.D. Maddi» Russian adaptation by D.A. Leontiev)

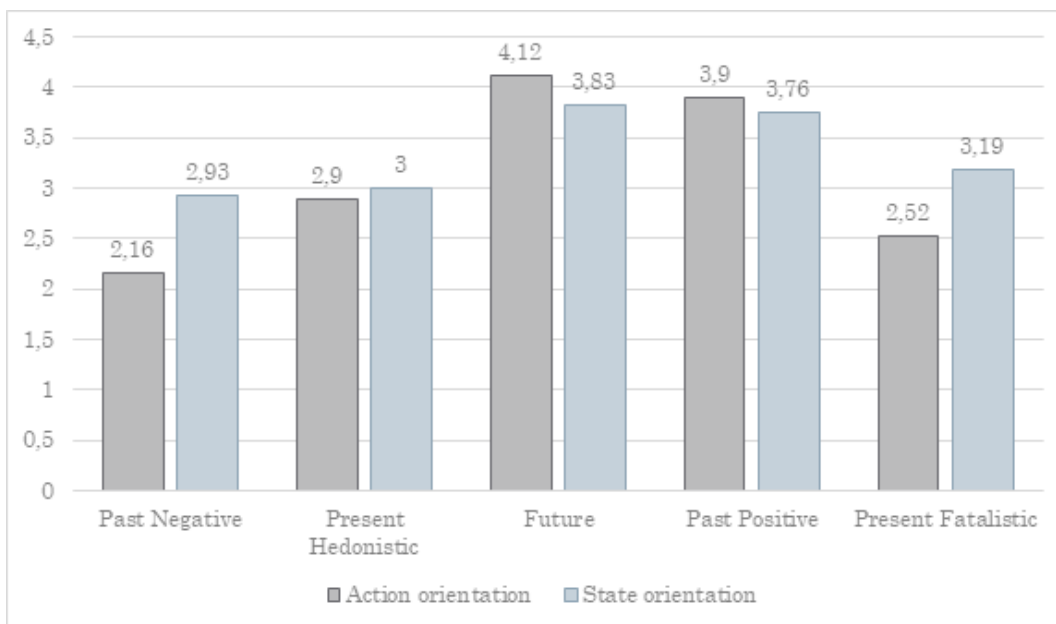


Time perspective

At the next stage, we analyzed the findings of the time perspective study in respondents with action/state orientation. Figure 2 shows the results of Zimbardo Time Perspective Inventory, ZTPI.

Figure 2

The results of the study in scores (Zimbardo Time Perspective Inventory, ZTPI)



Group 2 (state-oriented) has higher values on the "Past Negative" scale than Group 1 (action-oriented) (values of 2.93 and 2.16). Respondents in Group 2 (state-oriented) are less inclined to perceive their past as useful and meaningful experience. They focus more on the negative aspects of the past, and are more likely to interpret the past as a traumatic experience.

On the "Past Positive" Scale, the results in Group 1 (action-oriented) (3.9) were significantly higher than Group 2 (state-oriented) (3.76). Action-oriented people have a greater acceptance and meaningfulness of past experiences, they have a tendency to perceive the past as useful no matter the circumstances.

On the scale "Present Fatalistic" (2.5 and 3.19) higher results are in Group 2 (state-oriented) than in Group 1. Group 2 is more characterized as fatalists, believing in fate; as opposed to having a pronounced belief in themselves.

On the scale "Future" we can also record statistically significant differences in Group 1 (action-oriented) (4.12) and Group 2 (state-oriented) (3.83). Respondents with action orientation have highly formed life goals and the ability to construct the image of future.

So, attitudes toward time might be a resource that allows a person with positive past experiences to rely on their past and view it as a source of helpful coping skills to deal with life's challenges. Negative perception of the past is associated with being "frozen" in the present state, with the inability to predict the future and construct the image of the

future, with difficulties associated with overcoming external circumstances. A high focus on the future allows a person to become more resilient and prepared to cope with life's challenges.

Conscious Self-Regulation

We analyzed the features of self-regulation of respondents living in the zone of local armed conflict ("Self-Regulation Profile Questionnaire – SRPQM" by V.I. Morosanova).

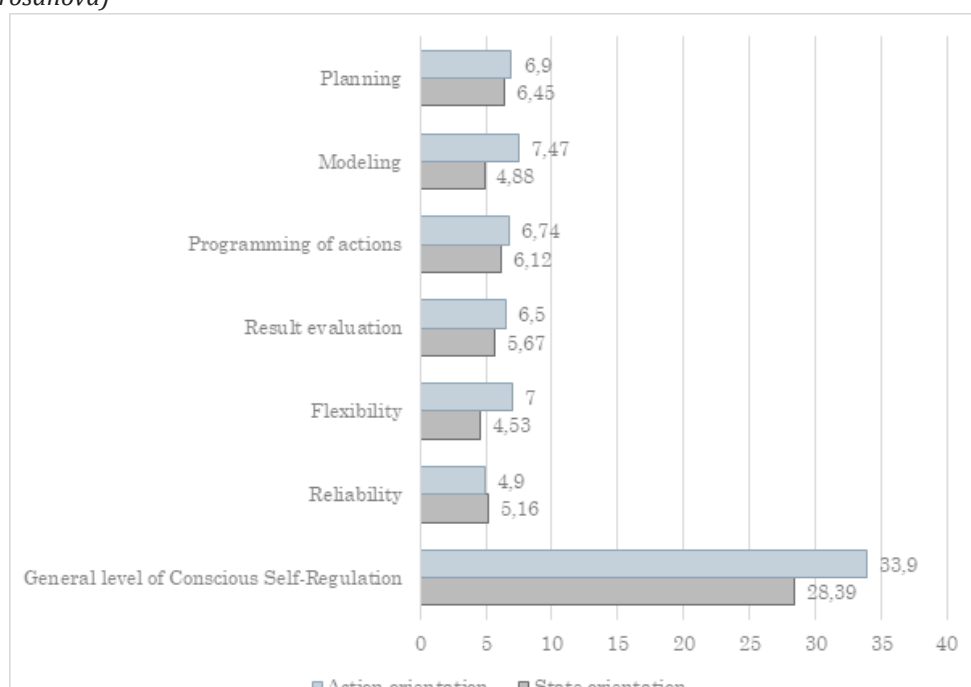
Group 1 (Action orientation) has higher scores on the scales than Group 2 (State orientation): "Planning" (6.9 & 6.45), "Modeling" (7.47 & 4.88), "Programming of actions" (6.74 & 6.12), "Result evaluation" (6.5 & 5.67) and "Flexibility" (7 & 4.53). Respondents with action orientation are tend to plan, predict results, evaluate the current condition and correct the ways of action if it is necessary. Respondents of this group are flexible, able to quickly assess current changes, highlight the most significant conditions and correct their own programs of action. In a situation of uncertainty action-oriented respondents may be more adaptable and successful.

The obtained data is statistically significant and summarized results are presented in Table 1.

Figure 3 shows the self-regulation profile of the two groups.

Figure 3

The results of the study in scores ("Self-Regulation Profile Questionnaire – SRPQM" by V.I. Morosanova)



In respondents living in the zone of local armed conflict, high and mid-range values with a tendency to high values prevail in all self-regulation scales (Figure 3). A developed system of conscious self-regulation may be a personal resource for adapting to ever-changing situation, especially in situations of long-term stress.

High values on "Planning", "Modeling", "Programming of actions" and "Result evaluation" scales let us to mention opportunities for self-regulation: the ability to consciously set goals, to observe and understand the conditions necessary to achieve goals ("Modeling"), to detail executive actions, to build an algorithm for their realization, to rely on specific environmental conditions to construct actions ("Programming of actions"); the ability to correctly assess the results of one's actions ("Result evaluation"). An important indicator for the studied sample is high values on the scale "Flexibility". People living in the zone of local armed conflict are able to take into account the factors affecting the achievement of goals, quickly react to current changes, and modify the program of behavior in accordance with new environmental conditions.

We found no age and gender differences in the results. The results of group comparison are summarized in Table 1. We applied the Mann-Whitney criteria.

Table 1

Summary table of research results in two groups (mid-range values, in scores)

Scales	Action orientation (Group 1)	State orientation (Group 2)	Significance level, p
Hardiness Survey			
Commitment	10.62	7.10	0***
Control	9.90	6.06	0***
Challenge	10.05	6.90	0***
Hardiness	30.57	20.06	0***

Scales	Action orientation (Group 1)	State orientation (Group 2)	Significance level, p
Zimbardo Time Perspective Inventory			
Past Negative	2.16	2.93	0***
Present Hedonistic	2.90	3.00	0.243
Future	4.12	3.83	0.001**
Past Positive	3.90	3.76	0.087
Present Fatalistic	2.52	3.19	0***
Self-Regulation Profile Questionnaire			
Planning	6.90	6.45	0.33
Modeling	7.47	4.88	0***
Programming of actions	6.74	6.12	0.006**
Result evaluation	6.50	5.67	0.003**
Flexibility	7.00	4.53	0***
Reliability	4.90	5.16	0.551

Note: * – empirical r_s values at $p < 0.05$; ** – empirical r_s values at $p < 0.01$; *** – empirical r_s at $p < 0,001$.

The data in Table 1 reflect the significance of group differences in hardiness, time perspective, self-regulation and allow us to suggest that action control can also act as a personal self-regulatory resource.

Correlation analysis

The final stage of the study is to use the r-Spearman correlation criteria to reveal the links among hardiness, self-regulation and time perspective in the groups of respondents (Table 2).

Correlation analysis in the Group 2 (state-oriented) showed negative correlations of the scale "Past Negative" and scales "Commitment" (-0.502**), "Control" (-0.311**), "Challenge" (-0.742**), "General level of Conscious Self-Regulation" (-0.381**), "Modeling" (-0.377**).

Table 2
 Correlation analysis in the Group 2 (state-oriented) (Spearman criteria)

	Commitment	Control	Challenge	General level of Conscious Self-Regulation	Past Negative	Present Hedonistic	Future	Present Fatalistic
General level of Conscious Self-Regulation							0.393**	
Past Negative	-0.502***	-0.311*	-0.742***	-0.381**				
Present Fatalistic	-0.399**	-0.409**	-0.418**	-0.386**				
Planning		0.339*		0.66***	-0.294*		0.6***	-0.279*
Modeling	0.411**	0.492***	0.425**	0.547***	-0.377**	-0.368**		-0.472***

	Commitment	Control	Challenge	General level of Conscious Self-Regulation	Past Negative	Present Hedonistic	Future	Present Fatalistic
Program- ming of actions	0.284*		0.296*	0.713***			0.344*	
Result evaluation	0.414**			0.519***	-0.36**	-0.289*		-0.409**
Flexibility			0.316*	0.449***				

Note: * – empirical r_s values at $p < 0.05$; ** – empirical r_s values at $p < 0.01$; *** – empirical r_s at $p < 0,001$.

In state-oriented behavior, fixation on the negative past significantly decreases a person's adaptive capabilities and resilience. Results presented at Table 1 empirically prove the correlation between hardiness (vitality and resilience) and time attitude, as well as our hypothesis that time attitude is a resource of self-regulation. The more negatively a subject view their past experiences, the lower their level of resilience. Therefore, the inability to reframe and accept one's past experiences can significantly reduce an individual's resources in coping with stressful situations in the present and the ability to project the future.

"Present Hedonistic" scale correlates with the scales "Commitment" (-0.399**), "Control" (-0.409**), "Challenge" (-0.418**), "General level of Conscious Self-Regulation" (-0.386**), "Modeling" (-0.368**), "Result evaluation" (-0.289**), "Reliability" (0.416**). Thus, respondents' orientation towards pleasure in the present is negatively related with resilience: the more a person seeks pleasure and enjoyment in the present, the less able a person is to demonstrate readiness for risk and the ability to manage the events of life.

Perhaps for Present Hedonistic oriented people emotional balance is very important. The tendency to receive positive emotions "here and there" often excludes the possibility of a conscious attitude to the events and circumstances of own life that can negatively affect the possibilities of conscious self-regulation. It was confirmed in our study.

The general level of self-regulation of respondents with state orientation and high desire for pleasure in the present is negatively correlated with the ability to model actions, evaluate performance outcomes. "Future" scale is positively related with the scales "Programming of actions" (0.344*) and "Planning" (0.6***), which reflects the cognitive-behavioral component of future orientation.

Table 3
Correlation analysis in the Group 1 (action-oriented) (Spearman criteria)

	Control	Challenge	Planning	Model- ing	Pro- gram- ming of actions	Result evaluation	Flexibility	Reli- ability
Commitment	0.498***	0.64***						
Control		0.621***					0.325*	
Challenge								
Hardiness			0.689***	0.411**	0.67***	0.572***	0.456***	0.297*
General level of Conscious Self- Regulation	-0.399**	-0.423**					-0.286*	
Present Hedonistic						-0.288*		0.336*
Future	0.317*	0.376**	0.431**					

In Group 1 (action oriented) (Table 3), we obtained that: "Past Negative" scale is negatively correlated with the scales "Control" (-0.399**), "Challenge" (-0.423**), "Flexibility" (-0.286**). This is consistent with the results of the study and allows us to draw a general conclusion for the whole sample about the connection between negative attitudes to

past and features of hardiness, resilience, and self-regulation. The ability to correct the programs of behavior under the impact of changing conditions ("Flexibility" scale) in case of negative evaluation of the past experience also decreases and the person becomes more rigid to changes. "Future" scale is positively correlates with the scales "Control" (0.317*), "Challenge" (0.376**), "Planning" (0.431**). Respondents in this group are the more likely to exhibit hardiness the more they are directed towards future.

Discussion

The problem of resilience and attitude to time as personal self-regulation resources is widely presented by world researchers. Conscious self-regulation, in general, has been studied in relation to time perspective and hardiness (Anisimova, 2022), time perception and time perspective (Baranova & Yakovleva, 2020; Baird et al., 2022; Chen, Liu & Cui, 2021; Klamut & Weissenberger, 2023), reflection (Godunov & Komerova, 2023), gender (Selezneva & Komerova, 2023). Meng et al. (2023) have described the links between procrastination, self-control and future time perspective. Witowska, Zajenkowski & Wittmann (2020) described the role of self-control and neuroticism in the integration of a well-balanced time perspective and time perception. S.V. Rusakov in the study of resilience and time perspective in prisoners who are serving a sentence in a high-security colony, it is shown that the higher the respondents' values on the scale "Past Negative", the lower the level of hardiness, which is in agreement with the results of our study (Rusakov, 2022).

Nowadays attitude to time is studied as part of the individual's psychological resources. So, Dukhnovsky S.V. notes that the attitude to time can be considered as a personal resource that increases adaptability in a crisis situation (Dukhnovsky, 2022). According to the author, time attitude (management of one's time) is a personal resource characteristic that determines the self-realization opportunities and efficiency in overcoming difficulties. Similar views can be found in G. Y. Martyanova, who states that "...a time perspective is part of a person's regulatory experience and time perspective may act as a conscious co-operative resource for coping with life's difficulties" (Martyanova, 2020, p. 40).

Self-regulation and self-control are predictors that influence the link between attitudes toward time and procrastination (Wang & Sun, 2023). Positive expectation of future results (attitude to time) when making decisions allows to regulate one's current behavior (self-control) in order to achieve long-term goals and reduce the risk of procrastination (Wang & Sun, 2023; Goschke & Job, 2023). Moreover, individual differences in time perspectives influence people's attitudes toward healthy lifestyle. People with a high future orientation are more health conscious, focused on the long term rather than on momentary pleasures (Guo, Lou & Zhang, 2023; Makarova, Makarova & Korovin, 2022).

The results of other researchers' studies are consistent with our results in the part of the correlation between attitude to time and hardiness as personal self-regulation resources. Thus, Molodozhnikov I.A., Guseinov A.Sh., studying capoeira athletes, empirically prove that capoeira predominantly develops a self-regulation system through agent qualities

(constructive coping strategies, personal maturity, personal harmony) with the growth of sports qualifications. Thus, with an increase in professional skill, a self-regulation system develops through the development of the general potential of the individual (Molodozhnikov, Guseinov, 2024). These findings are consistent with the results we obtained regarding the relationship between the characteristics of self-regulation and personal potential (resilience and attitude to time).

Conclusion

D. A. Leontiev divided personality resources into psychological resources of resilience (values, self-esteem, decision-making right); psychological resources of self-regulation (control over life circumstances, strategies of interaction with uncertainty, flexibility, action or state orientation (J. Kuhl), risk-taking); motivational resources (coping strategies) and instrumental resources (individual features).

Psychological resources of self-regulation are related to a person's attitude to time, hardiness and self-control. Perception of time perspective determines the ability of a person to act in a situation of uncertainty, to be involved in life, to perceive any experience as meaningful and important, to actualize personal potential and to be ready to take risks, to act in conditions of unguaranteed results. Thus, the "Past Negative" time perspective is related to low hardiness scores according to the results of our study; Future-orientation, on the other hand, provides high hardiness scores (challenge & control) as well as the ability to project and planning. The General level of Conscious Self-regulation is positively related to all scales of the Hardiness Survey and the scale "Future" of the Zimbardo Time Perspective Inventory. At a high level of Conscious Self-regulation a person is more capable to take decisions autonomously, analyze the external and internal conditions of the environment, and change the strategy of behavior if necessary. We found significant negative correlations on the "Past Negative" scale with all scales of the Hardiness Survey, with the General level of Conscious Self-regulation and the "Modeling" scale. The perception of one's past as negative significantly reduces the ability of a person to develop proper programs of action based on internal and external conditions. This tendency is especially pronounced in situations of uncertainty and stress, where flexibility in decision-making directly affects the successfulness of socio-psychological adaptation. All scales of the Hardiness Survey («Challenge», «Control», «Commitment») have significantly negative correlation with the scale "Present Fatalistic".

Results allow us to consider attitude to time, hardiness and action control as personal resources of self-regulation, that greatly determining a person's ability to cope with stress and to build productive strategies of behavior.

References

- Abulkhanova, K.A., Berezina, T.N. (2001). Person time and life time. Aletheia. (in Russ.).
- Anisimova, D.O. (2022). The time perspective of young men with different levels of resilience. World Science, (11(68)), 17–25. (in Russ.).

- Baird, H. M., Webb, T. L., Sirois, F. M., & Gibson-Miller, J. (2021). Understanding the effects of time perspective: A meta-analysis testing a self-regulatory framework. *Psychological Bulletin*, 147(3), 233–267. <https://doi.org/10.1037/bul0000313>
- Banshchikova, T.N., Sokolovskii, M.L., & Korosteleva, T.V. (2022). Self-regulation and Tolerance for Uncertainty as Resources for the Subjective Well-being of Modern Youth: a Cross-cultural Aspect. *RUDN Journal of Psychology and Pedagogics*, 19(4), 717–743. <https://doi.org/10.22363/2313-1683-2022-19-4-717-743> (in Russ.).
- Baranova, A.V., & Yakovleva, N.V. (2020). Possible Selves and Features of Self-Regulation in the Context of Subjective Perception of Time. *Personality in a changing world: health, adaptation, development*, 8(3), 327–337. (in Russ.).
- Chen, T., Liu, L., Cui, J. et al. (2021). Balanced Time Perspective and Life Satisfaction: The Mediating Role of «Temporal Negative Affect». *Journal of Happiness Studies*, 22, 2563–2574. <https://doi.org/10.1007/s10902-020-00330-9>
- Dukhnovsky, S.V. (2022). Relation to Time as Resource Characteristic of Personality. *Bulletin of Kaluga University. Series 1. Psychological Sciences. Pedagogical Sciences*, 5(1(14)), 55–61. (in Russ.).
- Godunov, M. V., & Komerova, N. E. (2023). Reflection as a Predictor of Attitude Towards Time Perspective. *Innovative Science: psychology, pedagogy, defectology*, 6(4), 64–72. <https://doi.org/10.23947/2658-7165-2023-6-4-64-72> (in Russ.).
- Golovaha, E.I., & Kronik, A.A. (2008). Psychological time of a person. *Meaning*. (in Russ.).
- Goschke, T., & Job, V. (2023). The Willpower Paradox: Possible and Impossible Conceptions of Self-Control. *Perspectives on Psychological Science*, 18(6), 1339–1367. <https://doi.org/10.1177/17456916221146158>
- Guo, M., Lou, Y. & Zhang, N. (2023). Consideration of future consequences and self-control mediate the impact of time perspectives on self-rated health and engagement in healthy lifestyles among young adults. *Current Psychology*, 42, 19670–19680. <https://doi.org/10.1007/s12144-022-03135-6>
- Kadyakina, N. M. (2009). Diagnostics of motivational and dynamic features of personal stability and self-regulation. *North-Caucasian Psychological Bulletin*, 7(2), 47–51. EDN RCQFUJ
- Klamut, O., & Weissenberger, S. (2023). Embodying Consciousness through Interoception and a Balanced Time Perspective. *Brain Sciences*, 13, 592. <https://doi.org/10.3390/brainsci13040592>
- Konopkin, O.A. (2004). General ability to self-regulation as a factor of subjective development. *Voprosy Psichologii*, 2, 127–135. (in Russ.).
- Konopkin, O.A. (2006). Involvement of emotion in the conscious regulation of goal-oriented human activity. *Voprosy Psichologii*, 3, 39–48. (in Russ.).
- Kormacheva, I.N., Dontsov, D.A., & Mashkova, L.A. (2021). The Influence of J. Kuhl's System Ideas on The Soviet and Russian Psychology of Will. *System Psychology and Sociology*, 1(37), 109–120. <https://doi.org/10.25688/2223-6872.2021.37.1.9> (in Russ.).
- Kuhl, J. (2000). A functional-design approach to motivation and self-regulation: The dynamics of personality systems interactions. In Boekaerts, M., Pintrich, P.R., & Zeidner, M (Eds.), *The Handbook of Self-Regulation*, pp.112–163.
- Leontiev, Д. А. (2016). Autoregulation, resources, and personality potential. *Siberian Psychological Journal*, 62, 18–37. <https://doi.org/10.17223/17267080/62/3> (in Russ.).
- Maddi, S. R. (2004). Hardiness: An Operationalization of Existential Courage. *Journal of Humanistic Psychology*, 44(3), 279–298, <https://doi.org/10.1177/0022167804266101>
- Makarova, E. A., Makarova, E. L., & Korovin, I.S. (2022). Time perception and time management during COVID-19 pandemic lockdown. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 10(1), 57–69. (in Russ.).

- Martyanova, G.Yu. (2020). The study of correlation between time perspective and self-regulation in a difficult life situation. *Psychologist*, (1), 34–43. (in Russ.).
- May, R. (2016). Love and will. *Bukap EBS*. (in Russ.).
- Meng, D., Zhao, Y., Guo, J. et al. (2023). The relationship between bedtime procrastination, future time perspective, and self-control. *Current Psychology*, 42, 11378–11387. <https://doi.org/10.1007/s12144-021-02419-7>
- Molodozhnikov, I. A., Guseinov, A. Sh., (2024). Agentic self-regulation of capoeira athletes of different sports qualifications. *Psychology in Russia: State of the Art*, 17(3), 81–95. <https://doi.org/10.11621/pir.2024.0306>
- Morosanova, V.I. (2022). Psychology of conscious self-regulation: from origins to modern research. *Theoretical and experimental psychology*, 3(15), 57–82. <https://doi.org/10.24412/2073-0861-2022-3-57-82> (in Russ.).
- Nuttin, Zh. (2004). Motivation, Action and Future Perspective: textbook for university students studying psychology. *Meaning*. (in Russ.).
- Price, M., Higgs, S., & Lee, M. (2017) Self-control mediates the relationship between time perspective and BMI. *Appetite*. <https://doi.org/10.1016/j.appet.2016.09.034>
- Rusakov, S.V. (2022). The relationship of viability and time perspective in the structure of life plans of convicts serving sentences in a strict regime colony. *Applied Legal Psychology*, 4(61), 64–71. (in Russ.).
- Selezneva, Y.V., & Komerova, N.E. (2023). Features of self-regulation and resilience of higher education teachers: gender aspect. *Proceedings of the International University Scientific Forum «Practice Oriented Science: UAE – RUSSIA – INDIA»*. (November 25, UAE).
- Tillich, P. (1995). *The courage to be*. Favorites.
- Wang, J., & Sun, Y. (2023) Time flies, but you're in control: the mediating effect of self-control between time attitude and academic procrastination. *BMC Psychology*, 11, 393. <https://doi.org/10.1186/s40359-023-01438-2>
- Witowska, J. Zajenkowski, & M. Wittmann, M. (2020) Integration of balanced time perspective and time perception: The role of executive control and neuroticism, *Personality and Individual Differences*, 163. <https://doi.org/10.1016/j.paid.2020.110061>
- Zimbardo, F., & Boyd, J. (2010). The time paradox. *The new psychology of time that will improve your life*. *Speech*. (in Russ.).

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Anastasia U. Tarasova – research, processing and graphical presentation of the results.

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Conflict of Interest Information

The authors have no conflicts of interest to declare.