

# Features meaningfulness of life among students with different attitudes to the time perspective as a component of sustainable social development

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**Abstract:** The article is aimed at analyzing the features of life style and meaningfulness of life among students depending on different attitudes to time. The analysis of modern studies of time perspective as a category of psychology is presented; the main components of meaning-life orientations, locus-control of the Ego are described. The object of the study was university students from 18 to 21 years old in the number of 294 people. The following methods were used: F. Zimbardo's time perspective questionnaire; D.A. Leontiev's "Life Orientations" test; Kellerman-Plutchik Lifestyle Index questionnaire, Mann-Whitney U statistical criterion; Spearman rank correlation. It is proved that depending on the respondents' attitude to the time perspective, both the level of meaningfulness of life and the strategy of behavior in stressful situations change. It is concluded that respondents with a focus on the future have a greater meaningfulness of life, they also are more tend to setting life goals. Moreover, the leading types of life styles statistically differ, depending on the the responders' attitude to time.

## 1 Introduction

The attitude to the time of life is the vector, the life guideline that forms the direction of personality development, its meaning-life content. The events of the macro- and microenvironment affect the individual's life strategies, which they construct as a result of assessing reality. The last few years have brought to the world infodemic tension, global digitalization, reduction of social contacts, the need for urgent development of "digital" skills, which has led to an aggravation of uncertainty, and, as a result, increased anxiety about the future. In our opinion, the attitude to the time of life in relation to the meaning-of-life orientations of young people, the choice of life strategies is of particular relevance.

Currently, there are studies that allow us to describe the types of experiences of subjective uncertainty. Only one type, however, is positive: it reflects an important productive potential for a person. Among them there is a type of experience, which includes difficulties with bearing anxiety. It leads to ambiguity and blurring of consciousness, the inclusion of a large number of psychological defenses, "hostility, splitting of the external

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and internal Other, threatening the psychological survival and integrity of the Self." The second type is also characterized by negative emotional states but, at the same time, there is ambivalence, ambiguity and the ability to experience negative emotions less acutely. Rather the "fear of novelty" is expressed, in connection with which a person is increasingly inclined to simplify reality. The third type of experience characterizes a person who is confused and for this reason, dependent on the social environment. The next type is represented by a state of "transgression and chaos", the absence of all boundaries. And finally, the last type of subjective uncertainty experiences is positive experience associated with suprasituative activity, the generation of new meanings, creative comprehension of reality. Thus, the impact of uncertainty is ambiguous, it requires scientific understanding and analysis.

Of particular research interest in the framework of this article is the study of the features of life-meaning orientations, goal-setting, meaningfulness of life, features in the use of psychological defenses of students which depend on different attitudes to time.

In recent years, the topic of time perspective has aroused great scientific interest in foreign studies. Thus, Lasota, A., Mróz, J. [1] noted that the time perspective has a significant impact on the perception and construction of various aspects of human life. The authors confirm the positive relationship between sustainability, the meaning of life and positive time prospects. Wendy, J. Phillips [2] explores the interrelationships of concepts such as balanced time perspective and life satisfaction. They proved that the balance of the time perspective is directly related to life satisfaction, anticipation of getting pleasure from the present. The "balanced time perspective" refers to the ease of switching a person in the perception of time past, present and future, depending on the situation. This is a certain "internal temporary mobility" that allows a person to balance between memories of past experiences, the needs of the present and the aspirations of the future. The balance of the time perspective characterizes a person as harmonious and stable in their life situation. Experiences, traumatic events, crises often stimulate a person to "get stuck" in a certain time (for example, "fixate" on memories of the past).

Baird, H. M., Webb, T. L., Sirois, F. M., & Gibson-Miller, J. [3] state that the attitude to the time perspective affects the results of human activity in various areas of life. They also hypothesize about a possible connection between a person's attitude to time and self-regulation processes. The authors conclude that a person with a certain attitude to the time perspective can achieve better results than others. Thus, the processes of decision-making, choice, and personal efforts also turn out to be interrelated with a person's attitude to time.

Chen, T., Liu, Ll., Cui, Jf. [4] analyze the relationship between a balanced time perspective and life satisfaction. The authors introduce a factor "temporary negative affect", reflecting a negative assessment of a certain time period of a person's life, which becomes the basis for the occurrence of anxiety and depression. Thus, the more balanced a person's time perspective is, the more his ideas about the time of life are positive — the more he is satisfied with it.

Webster, J. D., Vowinckel, J., & Ma, X. [5] describe the results of a study, investigates time perspective, mental health and the formation of the meaning of life. The results analysis showed that "meaning" is interconnected with a balanced time perspective and human well-being.

Within the framework of domestic publications, the given topic is noted in the following studies: semantic regulation and temporary organization of the modern personality life path [6]; features of the life perspective perception in a difficult life situation on the example of the COVID-19 pandemic [7]; psychological defenses of social network users with different levels of meaningfulness of life [8]; features of the foreign students' life style during the adaptation period [9]; analysis of the employee's lifestyle in

the framework of the prevention of professional deformations [10]; chronotopic characteristics of the students' world image [11].

The theoretical analysis of the study of life orientations and the formation of life styles is based on the works of such scientists as Abakumova I.V., Leontiev D.A., Leontiev A.N., Asmolov A.S., Frankl V., Kelly J., time perspective and attitude to time as psychological categories are described in detail in the works of Albukhanova-Slavskaya K.A., Akhmerova R.A., Berezina T.N., Regush L.A., Nyuttena J. [12], Zimbardo F., Golovakha E.I., Kronika A.A. [13], Levina K. and others.

Thus, the scientific development of this topic gives grounds to speak about its undoubted relevance in a constantly changing world, a situation of prolonged uncertainty and sometimes "forced" social isolation. A person's attitude to time and their assessment of events can be interconnected with the general meaningfulness of life, with the formation of life goals and priorities, and as a result, behavior

## 2 Methods

Purpose: to describe the features of the life style (using the example of the use of psychological defenses), the meaning of students' life orientations with different attitudes to time.

Research hypotheses: 1) the attitude to the time perspective can influence the meaning of life orientations and determine the leading type of lifestyle; 2) the orientation to the future can cause a high level of life meaningfulness and the life goals formation; 3) the leading type of psychological defenses will differ according to the attitude to the time perspective.

Methods. In order to study the features of the semantic sphere, the methodology "Life orientations" was used in the modification of D.A. Leontiev; to identify attitudes to time — F. Zimbardo's time perspective questionnaire; to determine the lifestyle and leading types of psychological defenses – the Kellerman-Plutchik Lifestyle Index questionnaire.; at the stage of mathematical statistics, the r-rank correlation criterion was used Spearman, statistical criterion U-Mann-Whitney.

The empirical basis of the study was the state budgetary institution of higher education "Don State Technical University".

The sample consisted of 1st-year students of the Faculty of Psychology, Pedagogy and Defectology and the Faculty of Media Communication aged 18-21 years in the number of 294 people. There are 141 young men and 153 girls among them.

## 3 Results

As a result of the data obtained (F. Zimbardo's "Time Perspective Questionnaire" methodology), three groups were formed with high average values on the scales of the methodology "Degree of orientation to the future" — high motivation to achieve future success, the ability to foresee and weigh the consequences of actions; "Hedonistic present" — a factor of obtaining pleasure in the present, "conniving" attitude to the time of life, the inability to make sacrifices in the present to achieve success in the future; "Negative past" - the degree of rejection of one's own past, a pessimistic outlook on life, anxiety and low self-esteem possibly. Thus, the following are distinguished: the subgroup "Future" — 37.2%, the subgroup "Negative past" - 28.7%, the subgroup "Hedonistic present" — 34.1%.

Turning to the results of the study, we will analyze them using the methodology of the "Time Perspective Questionnaire" by F. Zimbardo.

The "Fatalistic Present" scale reflects the belief that life is the result of a combination of circumstances, fate, "higher" forces, etc. It reflects a person's disbelief in the ability to

influence the course of life and is often accompanied by low self-esteem, inability to predict and plan their lives. The lowest scores (2.22) on this scale are in the "Future" subgroup which confirms the hypothesis that the focus on the future will be accompanied by a high meaningfulness of life, the formation of life priorities and self-confidence. A high indicator (3.18) on this scale was noted in the "Negative Past" subgroup which is quite understandable by the subjective unsuccessful assessment of past experience by respondents. They believe that external causes will determine fate and a person can have little influence on reality. Since the respondents are 18-19 years old, their past experience is associated with childhood and adolescence, and perhaps, being minors, they received this installation.

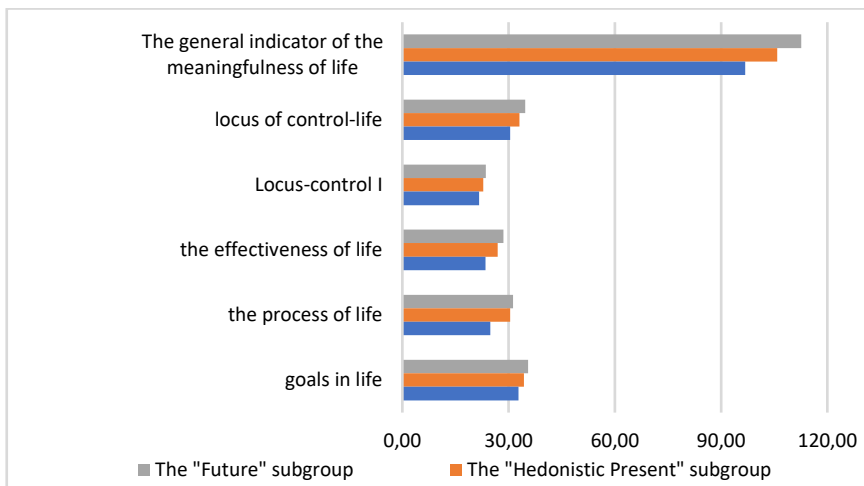
	Scale "Negative past"	Scale "Positive past"	Scale "Fatalistic present"	Scale "Hedonistic present"	Scale "Future"
Subgroup "Negative past"	3.70	3.67	3.18	3.65	3.92
Subgroup "Hedonistic present"	2.71	4.16	2.80	3.81	3.65
Subgroup "Future"	2.70	4.19	2.22	2.82	4.41

**Table 1.** The results of the study using the method "Time perspective Questionnaire" by F. Zimbardo.

The "Hedonistic Present" scale is a reflection of a person's desire to enjoy life in the moment, "here and now". The main life goal is getting pleasure, a weak willingness to plan, to limit needs to get results in the future. The "Future" subgroup has the lowest scores (2.82) here, since their focus on achieving goals is a priority.

The "Orientation to the future" scale reflects the disposition to achieve goals, life planning, attempts to anticipate life events and manage them. The lowest scores (3.65) on the scale are in the "Hedonistic Present" subgroup because, as was noted earlier, they believe in the fatality of life, so it is pointless for them to think about the future when it is unpredictable.

The results of the study using the method of "Life orientations" by D.A. Leontiev are presented in Figure 1.

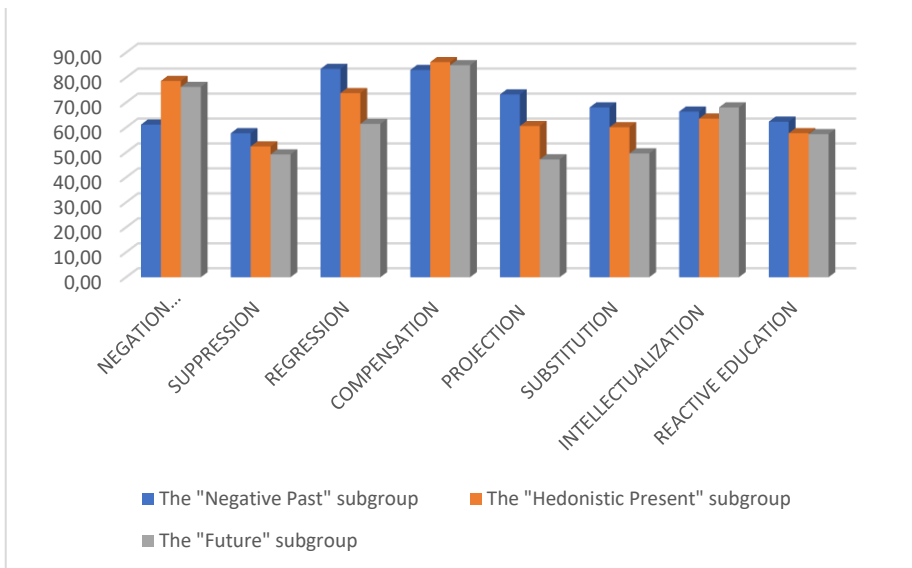


**Fig. 1.** The results of the study using the method of "Meaning-life orientations" by D.A. Leontiev.

Figure 1 shows that the respondents of the three groups have a fairly high overall meaningfulness of life, indicators below the average standards for all subgroups were not revealed. It is obvious that the "Future" subgroup revealed higher average scores on all scales which indicates that the aspiration to the future is due to a clearer formation of ideas about oneself, goals and the main results that the subject expects to receive from the process of life. The "Negative Past" subgroup showed the lowest results in the sample. It may be due to an unfavorable assessment of a person's past experience which affects his ideas about success in the future, as well as a lower score on the "Life Effectiveness" scale. The "Hedonistic Present" subgroup is in the middle range of normative indicators and between the other two subgroups, which indicates greater satisfaction with life in a particular segment, satisfaction from real events, as well as a lower level of frustration than the "Negative Past" Subgroup, but at the same time lower indicators of meaningfulness of life, formation of goals, than the "Future" subgroups are quite explicable by their desire to get everything "here and now".

Within the framework of this study, it was interesting for us to analyze the features of the psychological defense usage and evaluate the influence of the "attitude to time" factor on the severity of different types of defense mechanisms in students.

The ideas about the life style and the leading psychological defenses of the respondents were studied using the Kellerman-Plutchik Life Style Index technique. The results are presented below in Figure 2.



**Fig. 2.** Results of the study using the Kellerman-Plutchik "Lifestyle Index" methodology.

According to the results of data analysis, in the "Negative Past" subgroup, the leading types of psychological defenses were most pronounced: regression (83.48), compensation (83.05) and projection (73.24). Thus, withdrawal to earlier levels of personality development, more primitive types of response to an alarming situation, as well as living with feelings of inferiority, dissatisfaction with life circumstances, attributing unacceptable traits and motives to other people are characteristic types of reactions for this group.

For the respondents of the "Hedonistic Present" subgroup, the leading psychological defenses were: compensation (86.22), denial (78.67) and regression (73.80). People who tend to fixate in the present in case of problems or short-come in themselves and others are

set up to search for compensating elements that can replace a frustrating situation, often in other areas of life. Denial is a psychological defense and a life strategy, involving rejection of the problem, ignoring it. If you still have to face disturbing and frustrating events, the regression mechanism helps to overcome it, returning to the previous stages of development, a person is looking for help and perhaps appeals to her.

The result of the average scores analysis in the use of psychological defenses of the respondents of the "Future" subgroup showed that the leading types of psychological defenses are: compensation (84.96), denial (76.27), intellectualization (68.04). So, a person with an aspiration for achievement, goal-setting, encountering difficulties, is looking for ways to compensate for shortcomings with something else. This group is also characterized by ignoring, detachment from problems. In this case, there is a danger of underestimating the real level of the problem, downplaying its significance. As we can see, intellectualization is also a life strategy for overcoming difficulties. It reflects a person's desire to justify his actions through logical manipulations in the presence of a traumatic situation.

In order to study in more depth the influence of attitude to time on the meaningfulness of students' lives, a correlation analysis of empirical research data was carried out.

Table 2 below presents the results of Spearman's correlation analysis of each subgroup by methods.

**Table 2.** Results of Spearman's correlation analysis.

<i>The "Future" subgroup</i>		
Scales of research results		Empirical values of $r_s$
goals in life		0.517**
the process of life	negation	0.616***
the effectiveness of life	negation	0.734***
locus of control I	negation	0.635***
locus of control Life	negation	0.733***
is a general indicator of the meaningfulness of life	negation	0.652***
denial	substitution	-0.436*
compensation	substitution	0.443*
projection	reactive education	0.407*
substitution	intellectualization	-0.593**
<i>The "Hedonistic Present" subgroup</i>		
Scales of research results		
goals in life	negation	0.44**
the process of life	negation	0.501***
the effectiveness of life	negation	0.453**
locus of control I	negation	0.361*
locus of control Life	negation	0.646***

is a general indicator of the meaningfulness of life	negation	0.459**
suppression	projection	0.35*
regression	projection	0.467**
compensation	reactive education	0.329*
projection	substitution	0.357*
intellectualization	reactive education	0.311*
the effectiveness of life	regression	-0.319*
locus of control I	regression	-0.348*
regression	substitution	0.625***
<b><i>The "Negative Past" subgroup</i></b>		
<b>Scales of research results</b>		
the effectiveness of life	negation	-0.465*
locus-control I	negation	-0.441*
intellectualization	regression	-0.596**
the general indicator of the meaningfulness of life	substitution	-0.475*
denial	compensation	0.692***
regression	substitution	0.532*
the effectiveness of life	substitution	-0.446*
Note: marked * - empirical values $r_s$ by $p < 0,05$ ; ** - empirical values $r_s$ by $p < 0,01$ ; *** - empirical values $r_s$ by $p < 0,001$		

Table 2 of the results systematizes significant forward and inverse correlations (with empirical values of  $r_s$  at  $p < 0.05$ ,  $p < 0.01$  and  $p < 0.001$ ):

The following statistical patterns were revealed for the "Future" subgroup:

- direct correlations between the scales – "Goals of life", "Process of life", "Result of life", "Locus of control - I". "Locus of control -W", "General meaningfulness of life" and "Denial"; students with high motivation to achieve future success, aspiring to the future will tend to deny the significance of events taking place "here and now".

- "Compensation" and "Substitution"; "Projection" and "Reactive education".

- inverse correlations - "The general indicator of the meaningfulness of life" and "Substitution"; "The effectiveness of life" and "Substitution".

In our opinion, the positive relationship between all indicators of life-meaning orientations and the mechanism of denial may depend on the age of respondents. Students are characterized by a focus on the future, their ideas are vague, however, they are filled with affective experiences about beautiful, carefree happiness and success but also to be quite meaningful and definite. Students of this group tend to ignore any obstacles, difficulties that contradict their life plans, focusing on goals and plans for the future.

In the "Hedonistic Present" subgroup, positive correlations of meaningfulness of life and negation also appeared. It is also worth noting the negative relationships between the scales "Life effectiveness", "Locus of Self-control" and "Regression", which logically

follows from the statement that the more a person manages his life, the less he uses regressive types of reactions to problems, realizing the need to solve them independently.

The "Negative Past" subgroup differs significantly from the others by inverse correlations between the following scales: "The effectiveness of life", "Locus of self control" and "Denial", the higher the satisfaction with life at a given segment and the installation on the independent construction of the life path, the less psychological protection is used, manifested in ignoring problems.

Table 3 below presents the statistical results of the analysis of individual pairs of subgroups according to the Mann-Whitney U criterion.

Thus, the differences between the "Future" and "Negative Past" subgroups on the scales of "Life process", "Life effectiveness", "Locus of control W", "General meaningfulness of life" are statistically significant which also confirms the hypotheses put forward. Also, in the "Future" subgroup such types of psychological defenses as regression, projection and substitution are statistically significantly less pronounced, which is explained by a greater formation of life goals, an attitude to achieving results, an active life position, high overall meaningfulness, a choice of higher-level psychological defenses, such as compensation and intellectualization, aimed at active comprehension and overcoming problematic situations

**Table 3.** Results systematizes significant differences by pairs of subgroups.

Name of the scale	Mean_1	Mean_2	Rank_1	Rank_2	U- criteria	p_value
The "Future" subgroup and the "Negative Past" subgroup						
the process of life	31.231	24.81	28.692	18.19	389	0.013*
the effectiveness of life	28.5	23.476	26.712	20.643	376,5	0.026*
locus of control life	34.731	30.476	24.558	23.31	385	0.016*
regression	49.231	83.476	24.692	23.143	67	0***
projection	47.231	73.238	21.962	26.524	130,5	0.002**
substitution	49.615	68.048	27.327	19.881	171,5	0.028*
general meaningfulness of life	112.077	97.476	28.462	18.476	395	0.009**
Subgroups "Future" and subgroup "Hedonistic present"						
regression	49.231	73.8	35.692	36.178	264	0***
The "Negative past" subgroup and the "Hedonistic present" subgroup						
the process of life	25.55	30.467	26.7	35.8	619.5	0.016*
negation	61.15	78.667	35.925	31.7	621.5	0.014*

## 4 Discussion

The results obtained generally do not contradict a number of studies.

Thus, Witowska, J. Zajenkowski, M. Wittmann, M. write that a less balanced time perspective is associated with a higher level of neuroticism. Thus, the data we have obtained support this statement, since a negative assessment of past experience generates the use of regressive ways of responding to stress by an individual [14].



Bodecka, M. Nowakowska, I. Zajenkowska, A. Rajchert, J. Kazmierczak, I. Jelonkiewicz, I. note: "Despite the fact that many researchers have investigated the effect of quarantine in connection with COVID-19 on psychological distress, there is little data concerning the role of modern hedonistic time perspective and gender differences in the development of depressive symptoms and stress during this period of strict social distancing." And in our study, anxiety about the present and the future is a consequence of the aggravation of the situation of uncertainty, and the situation of forced social isolation [15].

Parker A. Dreves, Ginette C. Blackhart state that "a person's temporal perspective or tendency to pay attention to thoughts about the past, present or future is one of the factors influencing the incentive value of competing motives"[16].

Comparing the results obtained with similar works and the attitude to the time perspective, we note the data set out in the article by N.E. Komerova, G.P. Zvezdina, M.Y. Elagina (2021): "... during life, a person repeatedly reviews his attitude to past experience, and depending on this analysis, makes a conclusion about his success, well-being, life satisfaction. The motivational and value-semantic sphere of personality reflect the direction of personality development, its attitude to the time of life as a whole ..." [cit. on 10, p. 07065] [17,18].

## **5 Conclusions**

So, in the empirical study course of the features of students' life-meaning orientations, depending on their different attitudes to time, we were able to confirm the hypotheses put forward and empirically prove that the time perspective is a special three-dimensional model of the present, past and future time of life, largely determining life strategies. Having his attitude to time, a person creates certain semantic constructs of ideas about himself in time. Thus, a personal time perspective is constructed, according to which an individual chooses their life style, forms the meanings of their being, the possibility of achieving results, implementing a particular life strategy.

The analysis of the study of three groups of students with different attitudes to the time perspective revealed the following features: Respondents with high values of orientation to the future have less faith in the fact that the life path is determined by external events and everything is in the hands of "fate". This subgroup has a higher level of meaningfulness of the life path, a greater formation of life goals, a self-orientation in the implementation of tasks. Respondents with a high attitude towards the future and respondents with high scores on the "negative past" scale differ statistically significantly in the level of general meaningfulness of life, satisfaction with the process and result of life. The leading psychological defenses in the subgroup were compensation, denial and intellectualization. Also, respondents focused on achieving success in the future are statistically significantly less likely to have lifestyles associated with the manifestation of regression, projection and substitution. Direct correlations between denial and all scales of life-meaning orientations have been revealed, perhaps this is explained by the strategy of coping with anxious situations characteristic of this age, when young people tend to deny danger and underestimate risks, being directed to the future.

Respondents with high values on the "Hedonistic Present" scale are distinguished by a desire to live in the present moment. In this group, compensation, denial and regression are identified as the leading types of psychological defenses. It can be said that the lifestyle for the respondents of this subgroup can be characterized as a strategy of ignoring difficulties, compensating for frustrating stimuli by others, and using impulsivity, short temper and other affective manifestations in case it is impossible to resolve the situation. Statistically,

the regression level of this subgroup is higher than that of the subgroup with an aspiration to the future.

Respondents with high scores in assessing past experience as negative have a statistically significantly lower level of meaningfulness of life than the achievement-oriented subgroup. The data obtained showed high scores on the "fatalistic present" scale, which confirms the great faith of the respondents of the group that the way of life depends on external circumstances. The leading types of psychological defenses in the subgroup are regression, compensation and projection. In contrast to the other two groups, an inverse correlation was found between the level of denial and satisfaction with the result of life in this segment, as well as the locus of control – Life. It is also interesting that the lower the level of meaningfulness of life is, the less the replacement strategy is used.

The results obtained can be useful for developing courses on the problems of the life path of a person, attitude to time, understanding the stages of constructing an image of the future.

The prospect of the study may be the expansion of the sample in the context of age periods, gender identity, ethnic and religious affiliation; also of interest is the study of the time perspective of Internet users in the context of digitalization.

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