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Overview of the "Goal" Category in Psychology

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Abstract: **Introduction**. The article presents an overview of the category "goal" from a psychological point of view, reveals the current state of goal research. The results of about 100 literary sources, including empirical studies of goals, are summarized. An attempt is being made to collect the definitions of the goal and generalize them into a single construct. The structure and properties of goals, the relationship between means and goals, the hierarchy of goals and sub-goals, the relationship between goals and plans, the processes of setting and achieving goals are shown. The novelty of the work lies in the refinement of the category "goal", taking into account the currently available scientific knowledge, the construction of the psychological phenomenon "goal" based on the key characteristics used in the literature, identified deficiencies in the study of goals. **Theoretical Basis**. The theoretical developments of psychology in this field are used in all spheres of activity – in education, in production, in sports, in the healthcare system and in everyday life. Attention is paid to the conflict of goals and the distribution of resources between several goals, the T.O.T.E. model, the Rubicon action phases model, the Apter reversal theory, the concept of psychological distance to the goal, the topic of purposeful behavior from cybernetic positions. **Results**. The author gives a historical digression concerning the goal category of the late XIX–XX centuries, also reflects the results of research of modern times. Based on the analysis, it is established that the category "goal" in the XX century is rapidly developing and becoming one of the links of the motivational sphere of a person. **Discussion**. The category "goal" in psychology is the object of research of various psychological schools and trends and is of key importance in predicting behavior, occupies one of the central places in personality psychology. At this stage of the development of psychological science, the issues of the dynamics of the system of goals in various ecological environments and over time are insufficiently studied, the nature of the links in the system of goals is disclosed in the form of hierarchical schemes, without taking into account the weights of the connections themselves.

Keywords: goal, motivation, goal setting, goal hierarchy, goal conflict, goal achievement, behavior, need, value, stimulus

Highlights:

- The analysis of the terminology of the category "goal" in psychological science, the main theoretical provisions and some empirical studies is carried out.

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▹ There is a significant variety of terms in the field of goal research; goals serve as a standard against which representations of current or expected states are compared.
▹ Diversity arises from considerations of properties and relationships between goals, the way goals are presented, operations designed to achieve goals, monitoring and modification of behavioral sequences to implement plans and strategies and control the achievement of goals, and decision-making processes related to goals setting, achievement, revision and preservation of goals.

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Introduction

Human goals have long attracted the attention of researchers: at the moment there is a significant amount of theoretical and empirical research concerning the setting and achievement of goals. In many works, the target personality system is compared with various motivational phenomena, many relationships are revealed: what kind of efforts and to what extent contribute to achieving the goals, commitment to goals and success in achieving them, depending on the difficulty of goals, types of motivation and productivity of goal formation in solving complex tasks.

The category "goal" has existed since the birth of psychological thought itself and combines a wide range of meanings, which we will try to outline in this review.

Theoretical Basis

Analysis of the main research and publications

In the age of Enlightenment, F. Herbart, a German scientist, a supporter of the scientific analysis of mental representations (images), emphasized the importance of representations for explaining human behavior. American philosopher and psychologist W. James (James, 1902) associated self-regulation with the strengthening of a weak tendency to perform desired behavior, or with the weakening of a strong tendency to perform undesirable behavior. Analysis of the will of W. James was based on the assumption that behavior could potentially be regulated by subjective goals, even if in certain situations and at certain times it might be difficult.

In 1896, a student of W. Wundt (Wundt) O. Kulpe (Külpe) founded the Würzburg Psychological School of Experimental Research of Thinking and will. In the work of the Würzburg School, goals were of particular importance in psychological theorizing and received sustained conceptual and empirical attention. Expressions relevant to the purpose appeared, the term "final state" or "object" was usually used. Psychologists of the "Würzburg School" (O. Kulpe, K. Buhler, N. Ah, K. Marbe, etc.) abandoned the associationist understanding of mental activity in general and thinking processes. Goals and goal-setting are inextricably linked with thinking, which is an active directed process, the process of determining relationships (Antsiferova et al., 1966). W. Wundt in 1920 wrote about volitional processes and the principle of goal heterogeneity (Patel & Mehta, 2014; Fahrenberg, 2020). This principle manifests itself in the consequences of actions that go beyond the originally intended goal and create new motives that may lead to unexpected results. Thus, goals multiply as a result of self-creation of goals, the target organization (chain of motives) is constantly growing. This principle is important for understanding motivational processes.

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The work of I. P. Pavlov "The Reflex of the goal" (Pavlov, 2001) is of great importance for the development of the direction of goal research. Goals, according to I. P. Pavlov, belong to the category of innate human properties, to the main activity of the nervous system. The goal reflex is defined as the desire to possess a certain irritating object, as an important factor of behavior, as a manifestation of the most important stimulus of life. The scientist connects the question of the origin of the goal reflex with the general instinct of life. I. P. Pavlov emphasized the importance of this reflex in active, purposeful behavior (Pavlov, 2001, 2011).

With the development of behaviorism, in the second decade of the twentieth century, when psychology sought to limit itself to observable behavior, goals (and other mental processes and internal mental events) began to be pushed out of the framework of scientific psychology. Over time, the goals returned to the focus of scientific research. The representative of behaviorism (neobehaviorism later) E. Tolman drew attention to the fact that behavior is inextricably linked with purposefulness. The scientist sought to explain the purposeful nature of behavior, based on the observed behavior, he defined "goal–object" as an object or situation to which (from which) the organism is moving (Tolman, 1949). E. Tolman helped to preserve the central place of goals in psychology, while combining behaviorism and goal constructions.

By the 30s of the XX century, the psychological literature reflected the design of the goal. The word "goal" became commonplace and was used as a scientific term to describe or explain psychological phenomena; subsequent theoretical research focused on the presentation of specific variants of target constructs and their application in the field of motivation psychology.

S. Mace, a British researcher who, perhaps less than others, was influenced by American behaviorism, was the first to draw attention to the influence of various types of goals on task performance (Phillips, 1991), and also conducted the first empirical studies of goal setting in 1935, from which he concluded that there was people (workers) have the will to work – that the fact of achieving a goal in itself can act as a motivator (Carson et al., 1994).

In the 1930s and 1940s, G. Allport (1937; Allport, 2002) postulates the idea of functional autonomy of motives. Functional autonomy is an acquired motivation system that differs from the original motivation of behavior. The subsequent motif is formed by superstructure over the original one and functionally differs from it. Thus, a part of human motives is functionally independent of the original motives that determine behavior. Functional autonomy makes an attempt to justify the presence in adults of a complex of actual motives that do not currently have a visible orientation to the future state (Craik et al., 1993).

N. Ah (Ach, 1935) suggested that the connection in a person's mind of an expected situation with a specific intended behavior creates what he called "certainty (clarity)", which automatically triggers the intended action when a specific situation arises. The power of "certainty" is not related to the importance of a person's attention or purpose. N. Ah' assumption that automatic processes can greatly contribute to the achievement of a person's goal is confirmed by recent findings that self-regulation strategies as implementation intentions (Gollwitzer & Oettingen, 2011) have a beneficial effect on the basis of automatic processes, as well as the discovery that the desire to achieve a goal can be activated (i.e. initiated). outside of a person's consciousness by subconsciously presenting signals related to the goal (for example, signals that relate to activities related to the goal) (Bargh, 1990).

K. Lewin (Lewin, 1926) claims that when an organism sets a certain goal, the tension system comes into play and remains until the goal is reached or until the organism "leaves the field".

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Twenty years later, K. Lewin and his colleagues (Lewin et al., 1944) studied conscious goals (levels of aspiration). They considered the levels of aspiration as a variable dependent on various motivational factors (primarily other levels). Goals attach importance to objects and events in the social and non-social environment of people. Since needs can be satisfied by various types of behavior that can replace each other in reducing the stress of needs, many different purposeful actions are suitable for meeting quasi-data related to the goal. Thus, K. Lewin's metaphor of the state of tension explains the flexibility of striving for a goal.

With the emergence of a new interdisciplinary field of cybernetics research in the 1940s, goal research became even more popular. In the late 1940s and early 1960s, works appeared on the topic of purposeful behavior from cybernetic positions ("Behavior, Purpose and Teleology" by N. Wiener and J. Bigelow (Rosenblueth et al., 1943)). Cybernetic models assumed the use of biological and mechanical systems based on feedback, taking into account the fact that the system has a goal (target state). The main meaning of these systems is to strive to achieve a certain goal, to maintain the final state. In cybernetic models, a person has ideas about standards of behavior (generalized states characteristic of each individual) used through self-adjustment and self-organization to regulate behavior.

D. McClelland (McClelland) and J. Atkinson (Atkinson) in 1953 postulated the existence of internal motives, such as the need for achievements, but it was argued that they are subconscious. In the following years, J. Atkinson (1957) and D. McClelland (1985) developed the problem of the need for achievement from the point of view of the motive of power (Locke & Latham, 2002; Maehr & Sjogren, 1971).

In 1956, B. Bloom published the "Taxonomy of Educational Goals", classifying educational goals, in particular, within the framework of cognitive psychology. Achieving educational goals from the cognitive field included performing tasks related to the recognition of knowledge and the development of intellectual skills and abilities (Bloom et al., 1956; Anderson & Krathwohl, 2001).

The theory of functional systems (1930–1955) by the Soviet physiologist P. K. Anokhin (Anokhin, 1955) contains a "result acceptor of action" representing a cognitive model of future results in the form of a network of neurons. The circulation of arousal through this network allows you to keep the goal of human behavior. In other words, the goal is synonymous with the acceptor of the result of the action.

Later theories interpret people as just and omniscient final judges of their actions. For example, the theory of expected value (Atkinson, 1957) assumes that people choose goals in a rational way, based on a comprehensive knowledge of the probability of achieving the goal and the expected value of the goal (Wigfield, 1994). In the model of solving general problems, A. Newell (Newell et al., 1958) discussed the relationship between means and goals, and the hierarchy of goals and sub-goals.

G. Miller, E. Galanter (Galanter) and K. Pribram (Miller et al., 1960) revealed the relationship between goals and plans, and in 1960 published a model of T.O.T.E. ("Test – Operate – Test – Exit") describing the relationship between the structures of perception and behavior in animals and a person. According to the model, the behavior program consists of hierarchically arranged stages of testing and action. Testing consists in comparing the current result of an action with the target values or the desired state (goal), the actual value is compared with the reference value. The "operation" stage is characterized by actions to implement the intended goal. The key value in the model belongs to the feedback loop, through which action plans are corrected at

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the testing stage. When the current state corresponds to the reference state (the intended goal), the process ends, the "exit" phase begins (Miller et al., 1960).

In the 70s, E. Locke began to investigate the influence of goals on human activity, at this time the famous theory of goal setting was created, his first article on this topic "On the theory of motivation of tasks and stimuli" was published in 1968 (Locke, 1968).

At the same time, R. Ryan (Ryan, 1970) argued that human behavior is primarily influenced by conscious goals, plans, intentions, tasks, and the like. R. Ryan called the totality of these phenomena explanatory concepts of the first level – they are the direct motivational causes of most human actions.

T. Gyesme developed the concept of psychological distance to the goal, using the time before reaching the goal, orientation to the future time, considered as a trait, and the expectation of achieving the goal (probability of achievement) (Gjesme, 1981).

In the mid-1980s, J. Heckhausen and P. Gollwitzer set out to analyze how people control their actions. Dividing the control of actions into different phases significantly improved the understanding of this process. In 1987, J. Heckhausen and P. Gollwitzer proposed the Rubicon model of action phases, which describes the course of action as a temporary, linear path starting with a person's desire and ending with an assessment of the achieved results of the action (Heckhausen & Gollwitzer, 1987). The procedure of actions includes a stage of discussion of expediency (goal selection), a phase of planning specific strategies to achieve this goal, a phase of putting these plans into effect (activity stage) and a stage of analyzing the results achieved (post-activity stage) (Keller et al., 2020). The Rubicon model was subsequently replaced by the theory of thinking about the phases of action, in which each of the four stages was proposed to be associated with a special thinking (Gollwitzer, 1990, 2012). Subsequent studies have shown that implementation intentions that depend on specific conditions, linking context and actions, qualify as a powerful tool of self-regulation when it comes to achieving one's goals, regardless of which area these goals relate to. Implementation intentions are concrete "if–then" plans that define a critical situation (a suitable opportunity to act in accordance with the goal) and link it to a targeted response. Such plans increase the indicators of achievement of goals (Gollwitzer, 1999, 2014; Gollwitzer & Sheeran, 2006).

Studies also show that the availability and type of social support (Chiaburu et al., 2010; Martin, 2010; Orehek & Forest, 2016), as well as the regulation of emotions are equal or even more important than cognitive abilities in predicting both intention and the emergence of new habits on the way to the goal (Lawton et al., 2009).

Goals are an important component of the theory of activity, because they are directly related to actions. Actions are subordinated to the idea of the result to be achieved, and are components of the structure of the activity. A higher-order goal tends to break up into several specific goals that generate a certain set of sequential actions. The same action in this case can relate to different activities, move from one activity to another. Similarly, the goal may have a number of motives. The expanded activity presupposes the achievement of a number of specific goals, and the general goal is the setting of specific goals. A conscious motive is a common goal (motive-goal) (Leontiev, 1975).

S. L. Rubinstein considers the object of satisfying a need as a goal; objects become objects of desires and possible goals of the subject's actions when he includes them in the practical awareness of his attitude to the need (Ilyin, 2011; Yurov, 2015).

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In Russian psychology, the scientific school of O. K. Tikhomirov (Babaeva et al., 2008) dealt with the issues of the correlation of goals, the formation of goals, the levels of goals and meanings within the framework of the study of thinking. O. K. Tikhomirov's goals contain anticipated results of actions and are conditioned by external conditions. Different goals are highlighted in the action (hierarchy of goals). An action can be evaluated both in its relation to the "ideal" goal to which it aspires, and in relation to a specific goal with which this action is directly related. The image of the future result is always associated with the subject's assessment of the significance of this result and its achievability after the implementation of the action. The goal is characterized by varying degrees of clarity (Tikhomirov, 1984).

M. G. Yaroshevsky believed that future goals give a purposeful character to thinking, ordering the course of thought, determine the future sequence of actions (Yaroshevsky, 1985).

Soviet and Russian psychologist V. V. Petukhov in 1987, when determining the phenomenon of thinking, used a teleological approach, the most important characteristic of which is the internal orientation of the subject to achieve the goal. In the psychological structure of the task, as an element of the thought process, the initiating element is a subjectively set goal. In the course of the thought process (as a process of solving a problem), there is a transformation of the present requirement into a subjective goal, the nomination of intermediate goals (if necessary), the nomination of goals that go beyond the conditions of the problem situation and the requirements set. The idea of the future result is a subjective goal, thus the act of accepting the task is at the same time an act of transforming the set requirement into specific goals of the subject's actions to solve the problem (Petukhov, 1987).

M. Apter's theory of reversal (Apter, 1989, 2006) asserts that there are alternative states of motivational systems available to an individual for interaction with his environment. The theory includes metamotivational constructions within the framework of bistability. Bistability refers to the ability to switch between two states: telic (goal-oriented) and parathelic (activity-oriented). Focusing of a higher order (telic) can lead to a revision of plans and to a transition from telic states to parathelic states.

In the 1990s, a number of foreign scientists define the goal (or aspirations) as one of the very significant variables in the study of personality and motivation of the future, they conduct cycles of empirical research and offer methods for measuring goals (Nevstrueva et al., 2016).

Results

Sphere of definitions of the "goal" category

According to E. Hilgard (Hilgard, 1953; Leary, 2002), the goal is the final state or condition to which motivated sequentially unfolding behavior is directed and through which this sequence is completed.

In the gestalt psychological theory of thinking, M. Wertheimer designates the goal as an obligatory element of the task necessary to trigger directed behavior (Wertheimer, 1959; Wertheimer, 1987).

The goal is the image of the future result (Leontiev, 1975), as a mental anticipation of the result of activity (Kondakov, 2003).

The goal is a conscious, expressed in words, anticipation of the future result of an action, an image of future results indirectly related to the motive (Tikhomirov, 1984).

Goals are desired states that represent the consequences of behavior that a person seeks to

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achieve (positive consequences) or attempts to avoid (negative consequences) (Winell, 1987).

According to A. Reber and A. Raymond, a goal is defined as an internally presented mental task set by an individual that guides his behavior and directs him (Reber & Allen, 2000).

J. Austin and J. Vancouver defined goals as internal representations of desired states (outcomes, events, or processes) (Austin & Vancouver, 1996).

Goal is a cognitive representation encompassing the relationship of means to achieve the goal and desired results (Kruglanski et al., 2002). Goals consist, therefore, of the means to achieve the goal and the desired result.

Goals are described as building blocks for various development tasks, and their achievement contributes to the formation of long-term models of successful development (Freund & Riediger, 2006).

The goal is understood as the ideal image of the future result obtained with the help of thinking, the achievement of which is conditioned by the motivation of the thinking subject, and for the purpose of which certain actions must be taken. The goal may be a certain spatial position, a distant event, the desired state of oneself or another system for the actor (Glazunov & Sidorov, 2017).

Goals as an innate potential of dissatisfaction. Setting goals creates a negative mismatch between the actual and desired state (Kaftan & Freund, 2018).

D. Dörner's goals are beacons indicating the direction of action (Dörner, 1997). Goals can be defined as an internal representation of desired outcomes (Austin & Vancouver, 1996).

Goals are incidents that have not yet happened to a person, but a person wants them to happen to him. Since they cannot happen by themselves, a person follows a set of rules or a plan to ensure that the goal is achieved (Balcetis & Dunning, 2010).

The presence of many different concepts to describe the goals of personality implies the creation of a generalizing construct. R. Emmons (Emmons, 2003) used the term "personal aspiration" as a generalizing term for the study of personality goals. To emphasize the specifics of the construct, R. Emmons focuses on the differences between personal aspirations and other concepts of the target personality system, highlights the boundaries of various personal target units.

On the other hand, with such a large number of definitions of goals, it becomes necessary to highlight their key characteristics. The goal construction has been variously defined in terms of cognition (Locke, 2000; Locke & Latham, 1990; Fishbach & Ferguson, 2007), behavior (Bargh et al., 2001; Elliot, 2005), affect (Pervin, 1983; Ferguson & Bargh, 2004), personality orientation (Vasiliev, 2016), Neuroscience (Berkman & Rock, 2014; Berkman, 2018).

L. Barsalou (1991) considered goals as an aid in the classification of behavioral categories related to solving problems of understanding, transformation and organization of reality.

Studies of individual differences in terms of motivational orientations have replaced the construction of a need (motive) with constructions describing a general orientation towards goals, such as personal projects, personal aspirations, life tasks or identity goals. Such personal aspirations (Emmons, 1996; Gollwitzer & Kirchhoff, 1998) are more limited in scope and can be characterized in terms of expectations of success and complexity, the level of abstraction and avoidance, the degree of conflict with each other.

D. Hamilton, L. Katz (Katz) and V. Leirer (Hamilton et al., 1980), found that study participants who had the goal of impression formation remembered research material better than participants who had the goal of memorization, and unconscious activation of the goal can lead to behavior

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associated with the goal. The unconscious activation of the goal leads to the achievement of the goal and the corresponding emotional reactions if the pursuit of the goal goes well or badly (Shah et al., 2002).

In modern theories of motivation, a person has flexible strategies for achieving goals. Attention is paid to various tasks that a person must perform when converting desires into actions. When choosing goals, people strive to conform to the ideal of an omniscient and just person. When realizing an already set goal, people are determined to achieve their goal, become biased (Gollwitzer, 1990, 2012).

In the literature on goals, there are studies focused on the process of achieving goals and the allocation of resources between several goals (Zeelenberg & Pieters, 2007; Schmidt et al., 2009; Locke et al., 1994). The work of L. Pervin (1991) was one of the first in which the idea of multiple achievement of goals and their parallel processing was outlined; it is assumed that people have basic goals that are key, and background goals that are inaccessible to working memory, but are largely part of the goal system (Austin & Vancouver, 1996).

In the 20th century, goals were increasingly used in many studies of motivation (Bargh et al., 2010). One direction of goal research focuses on the determinants and processes of goal setting, while the other direction focuses on the implementation of goals. With regard to goal setting, it was found that people who interpret their Self as an ideal that they internally want to achieve set goals for themselves, focusing on establishing and maintaining positive results, while people who interpret their Self as a state (due state) that they feel compelled to achieve, set goals of avoidance, focusing on getting rid of negative results (Higgins, 2006). Goals are defined as a factor that plays a key role in the transition from an existing state to a desired state or result (Spence, 2007; Cytrynbaum et al., 1979; Emmons, 1986).

Due to the obvious importance of goals and phenomena related to goals for human activity, in the second half of the XX century. there is a noticeable socio-psychological theorizing about goals. The concepts of goals are increasingly present in the field of cognition, personality and motivation. A number of studies focus on the structure and properties of goals, as well as the content and setting of goals (Louro et al., 2007; Schmidt et al., 2009). Studies concerning the hierarchy of goals indicate that goals at different levels affect other goals in the goal system (Cropanzano et al., 1992; Ortony et al., 1988). At the same time, goals will not always contribute to the achievement of other goals in the system of equivalent goals – you need to make a choice between them. This situation is referred to in the motivation literature as a conflict of goals (Zohner, 1963); the pursuit of mutually exclusive goals is destructive to a person's internal resources (Anderson et al., 2004).

Regulatory strategies for achieving conflicting goals have also been studied. One of the regulatory strategies for achieving the conflicting goals outlined by J. Kuhl (2001), which benefits in the successful achievement of goals and overcoming the conflict of goals, is the control of actions. Goal shielding (Shah et al., 2002; Goschke & Dreisbach, 2008) is a self-regulating strategy that can be used to protect the achievement of the main goal from alternative ones. Another study is devoted to the phenomenon showing that people may have difficulties in setting their priorities (priority goals), and, as a strategy to get out of the situation, partially sacrifice the energy (strength) of striving for each of these goals, without giving up any of them. This situation in the literature on goals is called "the search for satisfying alternatives" ("satisfying", Simon, 1967; Silvestrini et al., 2022).

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Discussion

The category "goal" has a long history and is a complex and multifaceted psychological phenomenon that requires further scientific study. The ambiguity of the definition of the goal in science, the dependence of the characteristics of the goal in research on the tasks is shown.

Two key factors for achieving a goal include a person's commitment and commitment to the goal, and perseverance, reflecting how much people continue to invest in specific goals.

Intentions to implement plans have a beneficial effect on achieving the goal through automatic processes. The desire to achieve the goal can be activated unconsciously due to the stimuli of the external environment.

A goal is a form of self–regulation of behavior used by people consciously or unconsciously to achieve certain future states of their physical Self or the world around them. By focusing people's attention, goals promote a response consistent with people's goals. Goals give a person the ability to regulate their reactions that go beyond biologically determined predispositions. By engaging in purposeful behavior, people take into account future events, behaving in such a way as to either facilitate or prevent their occurrence. The key importance is the mental image of the future possibility (the state of reality), which affects the behavior in the present.

References

Ach, N. (1935). *Analyse des Willens [Analysis of will]*. Urban & Schwarzenberg.

Allport, G. W. (1937). *Personality: A psychological interpretation*. Henry Holt And Company.

Anderson, J. R., Bothell, D., Byrne, M. D., Douglass, S., Lebiere, C., & Qin, Y. (2004). An integrated theory of the mind. *Psychological Review*, *111*(4), 1036–1060. https://doi.org/10.1037/0033-295X.111.4.1036

Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York.

Anokhin, P. K. (1955). Features of the afferent apparatus of the conditioned reflex and their significance for psychology. *Voprosy psikhologii*, 6, 16–38. (in Russ.).

Antsiferova, L. I., Budilova, E. A., Slavskaya, K. A., Lektorskiy, V. A., Sadovskiy, V. N., Tikhomirov, O. K., & Bobneva, M. I. (1966). *The main research directions in the psychology of thinking in the capitalist countries*. Nauka. (in Russ.).

Apter, M. J. (1989). Reversal theory: A new approach to motivation, emotion and personality. *Anuario de Psicología*, *42*(3), 17–29.

Apter, M. J. (2006). *Reversal theory: The dynamics of motivation, emotion and personality paperback*. Oneworld Publications.

Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, *64*(6), 359–372. https://doi.org/10.1037/h0043445

Austin, J. T., & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin*, *120*(3), 338–375. https://doi.org/10.1037/0033-2909.120.3.338

Babayeva, Yu. D., Berezanskaya, N. B., Vasilyev, I. A., Voyskunskiy, A. E., & Kornilova, T. V. (2008). Sense theory of thinking. *Vestnik Moskovskogo universiteta. Seriya 14. Psikhologiya*, 2, 26–58. (in Russ.).

Balcetis, E., & Dunning, D. (2010). Wishful seeing: Motivational influences on visual perception of the physical environment. In E. Balcetis & G. D. Lassiter (Eds.), *Social psychology of visual perception* (pp. 77–101). Psychology Press.

Bargh, J. A. (1990). Auto-motives: Preconscious determinants of thought and behavior. Multiple affects from multiple stages. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 93–130). Guilford.

Bargh, J. A., Gollwitzer, P. M., & Oettingen, G. (2010). Motivation. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology*, 268–316. https://doi.org/10.1002/9780470561119.socpsy001008

Bargh, J. A., Gollwitzer, P. M., Lee-Chai, A., Barndollar, K., & Trötschel, R. (2001). The automated will: Nonconscious activation and pursuit of behavioural goals. *Journal of Personality and Social Psychology*, *81*(6), 1014–1027.

Barsalou, L. W. (1991). Deriving categories to achieve goals. In G. H. Bower (Ed.), *The psychology of learning and motivation* (Vol. 27, pp. 1–64). Academic Press.

Berkman, E. T. (2018). The neuroscience of goals and behavior change. *Consulting Psychology Journal: Practice and Research*, *70*(1), 28–44. https://doi.org/10.1037/cpb0000094

Berkman, E. T., & Rock, D. (2014). AIM: An integrative model of goal pursuit. *NeuroLeadership Journal*, 5, 1–11.

Bloom, B., Englehart, M., Furst, E., Hill, W., Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. Longmans, Green.

Carson, P. P., Carson, K. D., & Heady, R. B. (1994). Cecil Alec Mace: The man who discovered goal-setting. *International Journal of Public Administration*, *17*(9), 1679–1708. https://doi.org/10.1080/01900699408524960

Chiaburu, D. S., Van Dam, K., Hutchins, H. M. (2010). Social support in the workplace and training transfer: A longitudinal analysis. *International Journal of Selection and Assessment*, *18*(2), 187–200. https://doi.org/10.1111/j.1468-2389.2010.00500.x

Craik, K. H., Hogan, R., & Wolfe, R. N. (Eds.). (1993). *Fifty Years of Personality Psychology*. Plenum Press. https://doi.org/10.1007/978-1-4899-2311-0

Cropanzano, R., James, K., & Citera, M. (1992). A goal hierarchy model of personality, motivation, and leadership. *Research in Organizational Behavior*, *15*, 267–322.

Cytrynbaum, S., Ginath, Y., Birdwell, J., & Brandt, L. (1979). Goal attainment scaling: A critical review. *Evaluation Quarterly*, *3*(1), 5–40. https://doi.org/10.1177/0193841X7900300102

Dörner, D. (1997). *The logic of failure: Recognizing and avoiding error in complex situations*. Addison-Wesley.

Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52–72). Guilford Press.

Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, *51*(5), 1058–1068. https://doi.org/10.1037/0022-3514.51.5.1058

Emmons, R. A. (1996). Striving and feeling: Personal goals and subjective well-being. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 313–337). The Guilford Press.

Emmons, R. A. (2003). Personal goals, life meaning, and virtue: Wellsprings of a positive life. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 105–128). American Psychological Association. https://doi.org/10.1037/10594-005

Fahrenberg, J. (2020). *Wilhelm Wundt (1832–1920): Introduction, quotations, reception, commentaries, attempts at reconstruction*. Pabst Hardcover.

Ferguson, M. J., & Bargh, J. A. (2004). Liking is for doing: The effects of goal pursuit on automatic evaluation. *Journal of Personality and Social Psychology*, *87*(5), 557–572. https://doi.org/10.1037/0022-3514.87.5.557

Fishbach, A., & Ferguson, M. J. (2007). The goal construct in social psychology. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (pp. 490–515).

Freund, A. M., & Riediger, M. (2006). Goals as building blocks of personality and development in adulthood. In D. K. Mroczek & T. D. Little (Eds.), *Handbook of personality development* (pp. 353–372). Erlbaum.

Gjesme, T. (1981). Is there any future in achievement motivation? *Motivation and Emotion*, *5*, 115–138. https://doi.org/10.1007/BF00993892

Glazunov, Yu. T., & Sidorov, K. R. (2017). Goal-setting, goal achievement and volitional regulation. *Sibirskiy Psikhologicheskiy Zhurnal*, 64, 6–23. https://doi.org/10.17223/17267080/64/1 (in Russ.).

Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 53–92). The Guilford Press.

Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, *54*(7), 493–503. https://doi.org/10.1037/0003-066X.54.7.493

Gollwitzer, P. M. (2012). Mindset theory of action phases. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 526–545). Sage Publications Ltd. https://doi.org/10.4135/9781446249215.n26

Gollwitzer, P. M. (2014). Weakness of the will: Is a quick fix possible? *Motivation and Emotion*, *38*, 305–322. https://doi.org/10.1007/s11031-014-9416-3

Gollwitzer, P. M., & Kirchhof, O. (1998). *Span perspectives on motivation and control*. In J. Heckhausen et al. (Eds.). (pp. 389–423). Cambridge University Press.

Gollwitzer, P. M., & Oettingen, G. (2011). Planning promotes goal striving. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 162–185). Guilford Press.

Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in Experimental Social Psychology*, *38*, 69–119. https://doi.org/10.1016/S0065-2601(06)38002-1

Goschke, T., & Dreisbach, G. (2008). Conflict-triggered goal shielding: Response conflicts attenuate background monitoring for prospective memory cues. *Psychological Science*, *19*(1), 25–32. https://doi.org/10.1111/j.1467-9280.2008.02042.x

Hamilton, D. L., Katz, L. B., & Leirer, V. O. (1980). Cognitive representation of personality impressions: Organizational processes in first impression formation. *Journal of Personality and Social Psychology*, *39*(6), 1050–1063. https://doi.org/10.1037/h0077711

Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, *11*, 101–120. https://doi.org/10.1007/BF00992338

Higgins, E. T. (2006). Value from hedonic experience and engagement. *Psychological Review*, *113*(3), 439–460. https://doi.org/10.1037/0033-295X.113.3.439

Hilgard, E. R. (1953). *Introduction to psychology*. Harcourt, Brace.

Ilin, E. (2011). *Motivation and motives*. Piter. (in Russ.).

James, W. (1902). A study of man: The varieties of religious experience. *The New York Times*, 9.

Kaftan, O. J., & Freund, A. M. (2018). The way is the goal: The role of goal focus for successful goal pursuit and subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers.

Keller, L., Gollwitzer, P. M., & Sheeran, P. (2020). Changing behavior using the model of action phases. In M. Hagger, L. Cameron, K. Hamilton, N. Hankonen, & T. Lintunen (Eds.), *The handbook of behavior change* (pp. 77–88). Cambridge University Press. https://doi.org/10.1017/9781108677318.006

Kondakov, I. M. (2003). *Psychology. Illustrated dictionary*. Piter. (in Russ.).

Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. *Advances in Experimental Social Psychology*, *34*, 331–378. https://doi.org/10.1016/S0065-2601(02)80008-9

Kuhl, J. (2001). A functional approach to motivation: The role of goal-enactment and self-regulation in current research on approach and avoidance. In A. Efklides, J. Kuhl, & R. M. Sorrentino (Eds.), *Trends and prospects in motivation research* (pp. 239–268). Kluwer Academic Publishers.

Lawton, R., Conner, M., & McEachan, R. (2009). Desire or reason: Predicting health behaviors from affective and cognitive attitudes. *Health Psychology*, *28*(1), 56–65. https://doi.org/10.1037/a0013424

Leary, D. E. (2002). Ernest R. Hilgard (1904–2001). *History of Psychology*, *5*(3), 310–314. https://doi.org/10.1037/1093-4510.5.3.310

Leontiev, A. H. (1975). *Activity. Consciousness. Personality*. Politizdat. (in Russ.).

Lewin, K. (1926). Untersuchungen zur handlungsund affektpsychologie II: Vorsatz, wille und bedurfnis [Analyses of psychology of action and affect: Intention, will, and need]. *Psychologische Forschung*, 7, 330–385. https://doi.org/10.1007/BF02424365

Lewin, K., Dembo, T., Festinger, L., & Sears, P. S. (1944). Level of aspiration. In J. M. Hunt (Ed.), *Personality and the behavior disorders* (pp. 333–378). Ronald Press.

Locke, E. (2000). Motivation, cognition, and action: An analysis of studies of task goals and knowledge. *Applied Psychology*, *49*(3), 408–429. https://doi.org/10.1111/1464-0597.00023

Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior & Human Performance*, *3*(2), 157–189. https://doi.org/10.1016/0030-5073(68)90004-4

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Prentice Hall.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705–717. https://doi.org/10.1037/0003-066X.57.9.705

Locke, E. A., Smith, K. G., Erez, M., Chah, D.-O., & Schaffer, A. (1994). The effects of intra-individual goal conflict on performance. *Journal of Management*, *20*(1), 67–91. https://doi.org/10.1177/014920639402000104

Louro, M. J., & Pieters, R., & Zeelenberg, M. (2007). Dynamics of multiple-goal pursuit. *Journal of Personality and Social Psychology*, *93*(2), 174–193. https://doi.org/10.1037/0022-3514.93.2.174

Maehr, M. L., & Sjogren, D. D. (1971). Atkinson's theory of achievement motivation: First step toward a theory of academic motivation? *American Educational Research Association*, *41*(2), 143–161. https://doi.org/10.3102/00346543041002143

Martin, H. J. (2010). Workplace climate and peer support as determinants of training transfer. *Human Resource Development Quarterly*, *21*(1), 87–104. https://doi.org/10.1002/hrdq.20038

Miller, G. A., Galanter, E., & Pribram, K. H. (1960). *Plans and the structure of behavior*. Henry Holt and Co. https://doi.org/10.1037/10039-000

Nevstruyeva, T. Kh., Pomchenko, M. A., & Rezanova, N. V. (2016). Categorical structure of personal aspirations in the context of the goal personality system (on the example of university students). *Vyssheye obrazovaniye segodnya*, 8, 49–54. (in Russ.).

Newell, A., Shaw, J. C., & Simon, H. A. (1958). Elements of a theory of human problem solving. *Psychological Review*, *65*(3), 151–166. https://doi.org/10.1037/h0048495

Olport, G. (2002). *Becoming a personality: Selected works* (L. V. Trubitsyna, D. A. Leontiev, transl.). Smysl. (in Russ.).

Orehek, E., & Forest, A. L. (2016). When people serve as means to goals: Implications of a motivational account of close relationships. *Current Directions in Psychological Science*, *25*(2), 79–84. https://doi.org/10.1177/0963721415623536

Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. Cambridge University Press. https://doi.org/10.1017/CBO9780511571299

Patel, A. P., & Mehta, A. (2014). Person of the issue: Wilhelm Wundt (1832–1920). *The International Journal of Indian Psychology*, *1*(4). https://doi.org/10.25215/0104.001

Pavlov, I. P. (2001). *Goal reflex*. Piter. (in Russ.).

Pavlov, I. P. (2011). *Freedom reflex*. Piter. (in Russ.).

Pervin, L. A. (1983). The stasis and flow of behaviour: Toward a theory of goals. In M. M. Page (Ed.), *Nebraska symposium on motivation* (pp. 1–53). Lincoln.

Pervin, L. A. (1991). Self-regulation and the problem of volition. In M. L. Maehr & E. R. Pintrich (Eds.), *Advances in achievement and motivation* (Vol. 7, pp. 1–20). JAI Press.

Petukhov, V. V. (1987). *Psychology of thinking: Educational and methodological manual for students of the psychological faculties of state universities.* MSU Publ. (in Russ.).

Phillips, P. L. (1991). *Cecil alec mace: The life and times of the original goal-setting experimenter*. Louisiana State University, Baton Rouge.

Reber, A. S., & Allen, R. (2000). Individual differences in implicit learning: Implications for the evolution of consciousness. In R. G. Kunzendorf & B. Wallace (Eds.), *Individual differences in conscious experience* (pp. 227–247). https://doi.org/10.1075/aicr.20.11reb

Rosenblueth, A., Wiener, N., & Bigelow, J. (1943). Behavior, purpose and teleology. *Philosophy of Science*, *10*(1), 18–24. https://doi.org/10.1086/286788

Ryan, T. A. (1970). *Intentional behavior: An approach to human motivation*. Ronald. https://doi.org/10.1177/0002764270014001111

Schmidt, A. M., Dolis, C. M., & Tolli, A. P. (2009). A matter of time: Individual differences, contextual dynamics, and goal progress effects on multiple-goal self-regulation. *Journal of Applied Psychology*, *94*(3), 692–709. https://doi.org/10.1037/a0015012

Shah, J. Y., Friedman, R., & Kruglanski, A. W. (2002). Forgetting all else: On the antecedents and consequences of goal shielding. *Journal of Personality and Social Psychology*, *83*(6), 1261–1280. https://doi.org/10.1037/0022-3514.83.6.1261

Silvestrini, N., Musslick, S., Berry, A. S., & Vassena, E. (2022). An integrative effort: Bridging motivational intensity theory and recent neurocomputational and neuronal models of effort and control allocation. *Psychological Review*. https://doi.org/10.1037/rev0000372

Simon, H. A. (1967). Motivational and emotional controls of cognition. *Psychological Review*, *74*(1), 29–39. https://doi.org/10.1037/h0024127

Spence, G. B. (2007). Gas-powered coaching: Goal attainment scaling and its use in coaching research and practice. *International Coaching Psychology Review*, *2*(2), 155–167.

Tikhomirov, O. K. (1984). *Psychology of thinking: Textbook*. Moscow University Publ. (in Russ.).

Tolman, E. C. (1949). *Purposive behavior in animals and men*. University of California Press.

Vasilyev, Ya. V. (2016). Goal orientation of personality: characteristics of goals and life cycles. *Studia Humanitatis*, 4, 10. (in Russ.).

Wertheimer, M. (1959). *Productive thinking*. Harper.

Wertheimer, M. (1987). *Productive thinking* (S. D. Latushkin, transl.; E. M. Pchelkina, ed.). Progress. (in Russ.).

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental perspective. *Educational Psychology Review*, *6*, 49–78. https://doi.org/10.1007/BF02209024

Winell, M. (1987). Personal goals: The key to self-direction in adulthood. In M. E. Ford & D. H. Ford (Eds.), *Humans as self-constructing living systems: Putting the framework to work* (pp. 261–287). Erlbaum.

Russian Psychological Journal, 2022, Vol. 19, No. 4, 122–136. **doi**: 10.21702/rpj.2022.4.8

Yaroshevskiy, M. G. (1985). Psychology of creativity and creativity in psychology. *Voprosy psikhologii*, 6, 14–26. (in Russ.).

Yurov, I. A. (2015). S. L. Rubinstein: Dialectical-materialistic and humanistic psychology. *Psikholog*, 4, 37–84. https://doi.org/10.7256/2409-8701.2015.4.15394 (in Russ.).

Zeelenberg, M., & Pieters, R. (2007). A theory of regret regulation 1.0. *Journal of Consumer Psychology*, *17*(1), 3–18. https://doi.org/10.1207/s15327663jcp1701_3

Zohner, G. D. (1963). *Effects of degree of confinement, stimulus similarity, and number of approach and shock trials on approach-avoidance in free space* (Doctoral Dissertation). https://scholarworks.umass.edu/dissertations_1/1877

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Conflict of Interest Information

The author has no conflicts of interest to declare.