

DOI: 10.51217/npsyresearch_2023_03_04_04

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Self-Determination Theory and the Externalization Continuum

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Теория самодетерминации и континуум экстернализации

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Externalization as attributing some aspect of one's internal world to the outside traditionally attracts the attention of scholars in psychology. In modern cognitive psychology and cognitive science, externalization, in the form of anticipation, is considered the main mechanism of cognition. Researchers have demonstrated that the Theory of Predictive Coding not only relates to perception but can also underpin descriptions of how the human brain functions. This paper proposes the introduction of externalization into Self-Determination Theory. The universal character of externalization implies that a person's activities are often regulated not by actual external rewards, punishments, norms, values, and behaviors, but by their assumptions and hypotheses about them. The degree of reasonableness of such hypotheses can vary in a wide range. It logically leads to the introduction of an externalization continuum, similar to the internalization continuum in Self-Determination Theory. It can be observed that human behavior regulated through externalization is more autonomous than behavior regulated externally. Simultaneously, externalized regulation, unlike internalized regulation, does not involve the internalization of norms, values, and behaviors. A person whose behavior is regulated through externalization, attributes the ability to satisfy certain needs to specific objects. The behavior turns out to be purely utilitarian in nature. Values and behaviors often undergo repeated cycles of externalization and internalization, which makes it challenging to differentiate between various types of regulation in many instances.

Key words: Self-Determination Theory, externalization, motivation, activity, Theory of Predictive Coding

For citation: Nikolaev, D.E. (2023). Self-Determination Theory and the Externalization Continuum. *New Psychological Research*, No. 4, 67–79. DOI: 10.51217/npsyresearch_2023_03_04_04

Introduction

Over the past 45 years, Self-Determination Theory (SDT) has gradually evolved to become one of the leading theories of human motivation (Gagné, Deci, 2014, p. 1) and personality (Leontiev, 2018, p. 102). In addition

to some theoretical understanding, this theory, which was originally formulated by R. Ryan and E. Deci based on empirical data, continues to receive extensive empirical validation.

SDT offers a unique perspective on external motivation. Unlike some viewpoints that consider extrinsically motivated behavior as invariably non-autonomous, SDT suggests that the degree of autonomy can greatly vary (Ryan, Deci, 2000a). SDT provides a framework that distinguishes various types of extrinsic motivation by specifying four regulatory styles. Three of them represent a unique way in which regulations and values can be internalized (Ryan, Deci, 2017).

The external regulatory style assumes that changes in motivation occur due to external influences. The behaviors are performed to satisfy an external demand or obtain an externally imposed reward contingency (Ryan, Deci, 2000a). This type of regulation is characterized as having an external perceived locus of causality.

The three internalized regulatory styles are closely associated with the socio-cultural context. Through the process of internalization, individuals adopt and partially transform values and behaviors that were previously established by others, reproducing them in specific situations beyond the immediate influence of their surrounding reality. Unlike external motivation, which is influenced by external circumstances, internalized motivation is shaped by intrapsychic factors. This process may involve introjection, identification, and integration. Although the regulation originates from within the individual's personality, the locus of causality can be either external or internal depending on the extent of internalization.

R. Ryan and E. Deci argue that introjected regulation is closely linked to projection and is partially based on it (Ryan, Deci, 2017, p. 186). This very interesting remark means that a person often projects his norms and behaviors onto people around him, and then internalizes these norms and behaviors as if they originally belong to other people. Thereafter these introjects act as regulators of his behavior.

R. Ryan and E. Deci mention projection in the context of introjected regulation. Does this imply that other types of regulation are not related to attributing a part of mental content to the people around them, society, and the world? Perhaps, certain values, with which a person can later identify, can be attributed to other people. In addition, rewards and punishments can be attributed to the surrounding world, which can then act as external regulators of activity. Finally, there is nothing to prevent a person from attributing curiosity and interest in any activity to other people, and subsequently internalizing the corresponding behavior as an introject. This suggests that

externalization plays a greater role in the formation of human motivation than what is currently assumed by SDT.

Several approaches to Externalization in psychology

Externalization as the process of attributing the part of one's inner content to external reality is being investigated in psychology within the framework of various paradigms. Often, the consideration of externalization occurs inseparably with the reverse process – internalization.

In L.S. Vygotsky's cultural-historical theory, externalization is given a key importance. A person masters himself from the outside with the help of cultural means of signs. "...memorization based on the use of signs is regarded by us as a typical instance of all cultural methods of behaviour. The child solves an inner problem by means of exterior objects. This is the most typical peculiarity of cultural behaviour" (Vygotsky, 1929, p. 419).

In narrative therapy, externalization is understood in a specific way as a therapeutic practice of separating problems from person's identity (Freedman & Combs, 1996; White, 2007; Hamkins, 2013).

J. Sandler and M. Perlow analyze the various meanings of the term "externalization" in psychoanalysis. They note a variety of different approaches, but end the review this way: "The suggestion has also been made that the term be used as a 'blanket' term to cover all forms of attributing some aspect of one's internal world or one's psychic structure to the outside". (Sandler & Perlow, 1987, p. 7). In this paper, "externalization" is using exactly in the same way.

Some researchers, developing the ideas of L.S. Vygotsky and the extended mind hypothesis proposed by Clark and Chalmers (1998), note that modern information technologies create conditions for a new, digital externalization (Falikman, 2020; Skulmowski, 2023). In this approach, cognitive externalization means using the environment to outsource mental computation.

A.G. Asmolov considers the explanation of the appropriation and reproduction of socio-historical experience through interiorization/exteriorization to be among the basic principles of the Activity Theory (Asmolov, 2007). He notes that exteriorization underlies the process of individualization of a person, the manifestation of personality as a subject of activity. A.G. Asmolov also notes that exteriorization as "crystallization of values in the products of activity" is the basis of such concepts as "valence" (K. Levin), "functional fixedness" (K. Duncker), "object of the need" (A.N. Leontiev), "objective action" (N.A. Bernstein).

In modern cognitive psychology and cognitive science, ideas about anticipation as the main mechanism of cognition come to the fore (Falikman, 2021). Quite influential Theory of Predictive Coding posits that the person actively predicts upcoming information rather than passively registering it (de-Wit et al., 2010). According to this concept, the brain is continually engaged in formulating predictions, or hypotheses, about the causes of its sensory inputs, and in testing these predictions against incoming streams of sensory signals – thereby shaping perceptual content, guiding action, and driving learning (Seth, 2020). Such an incessant process of unconsciously hypothesizing undoubtedly constitutes externalization. Scholars note that “predictive perception happens from the inside-out, just as much – if not more – than from the outside-in” (Seth, 2020, p. xv), and moreover “perception is controlled hallucination” (Clark, 2016, p. 14). The researchers also show that the Theory of Predictive Coding does not only relate to cognition, it can underlie the description of how the human brain works in general (Hohwy, 2013).

The universal character of externalization implies that in many cases a person’s activity is regulated not by real external rewards and punishments, norms, values and behaviors, but by their assumptions, hypotheses about them.¹ In SDT, this can be considered in several different ways. For example, by introducing a new type of activity regulation – an externalized one.

Externalization Continuum

R. Ryan and E. Deci substantiated the introduction of a continuum of autonomy and internalization in SDT. To simplify, we can say that the position in this continuum characterizes the proportion of external and internal in the internalized content (for example, norm or behavior). With increasing internalization, norms and behaviors are becoming more integrated and fully assimilated to the self.

Similarly, a continuum of external-dependency and externalization can be introduced into SDT. The position in this continuum characterizes the proportion of external and internal in the images of rewards and punishments, which are perceived as related to real external objects. With decreasing externalization, such images become less dependent on the subjectivity of the individual perceiving them, as well as on their interpretations.

Externalized regulation cannot be considered as a variant of external regulation. Despite the fact that both of these styles are characterized by an external locus of control, the relevant regulatory processes differ. In the case of external regulation, these are really existing external rewards

¹ These hypotheses are more or less verifying by the person (to describe the verification process, researchers refer to Bayesian Brain Theory).

and punishments. For example, in the workplace, this can include monetary rewards and bonuses, employee promotions, expert status, recognition of merits, corporate insignia, fines, additional workload, dismissal, etc. With externalized regulation, the source is fictional, as it involves fake external rewards and punishments. This is the mental content, the “controlled hallucination” of the employee himself, unconsciously attributed by him to external objects and people. Thus, an employee who constantly provokes conflicts may be demotivated by a perceived unhealthy atmosphere in the team. It is important that the situation in which colleagues constantly aggressively criticize him for nothing exists only in his imagination. In another case, an employee may be motivated by the prospect of taking a vacant position, allegedly “feeling” more attention and trust from the CEO. But the whole situation is just a fantasy – in reality, no increased attention and trust is given to him, his promotion is not considered and is not discussed by anyone.

It is obvious that the external and externalized types of regulation assume a significantly different degree of personality activity. In the case of external regulation, the maximum activity that a person can show is a biased perception. The externalized type implies a significantly greater role for the individual’s personality. In addition to biased perception, the processes of active unconscious construction of content that will be perceived and its attribution to other people are also involved. The externalized type of regulation also cannot be considered as a variant of the internalized one. The key difference between them is also relevant regulatory processes. With externalized regulation, despite the fact that some aspects of one’s internal world are attributed to the outside, this content is perceived as an objective characteristic of the external world. With internalized regulation, rewards and punishments are not external; instead, they are linked to one’s self-esteem (Ryan & Deci, 2000b).

Depending on the degree of internalization and integration, relevant regulatory processes involve self-control, ego-involvement, internal rewards and punishments, personal importance, conscious valuing, congruence, awareness, and synthesis with self. In this case, a person may be motivated by the desire to avoid shame, to feel pride, or to do something important. Their activity cannot be regulated by external rewards and punishments, even with the characteristics attributed to them. Personality activity corresponding to externalized and internalized regulation differs significantly. In the first case, as noted earlier, some aspects of one’s internal world are attributed to the outside, and thereafter, they are perceived with bias. In the second case, during the process of socialization, a person internalizes

certain behaviors, norms, and values. Simultaneously, this content is transformed and integrated to a certain extent before it becomes a source of motivation.

To illustrate the difference between various types of regulation, R. Ryan and E. Deci provide an example of an adolescent girl who drinks (Ryan, Deci, 2017, p. 184). The external regulation for not drinking would be manifested as her abstinence when she believes there is a chance she will be caught by parents. Thus she might drink only when they are away; or, if she fears their monitoring is pervasive, she might show ongoing abstinence. She waits until she goes away to college. The introjected regulation for not drinking implies that she would feel ashamed or self-critical if she drank. She might also feel prideful and morally righteous when judging others who do not abstain. If the teenager identified with the importance of not drinking, she would abstain willingly, whether or not she was being monitored, and likely see it as of value for her health or safety.

Obviously, these opportunities do not cover all options for external motivation. In addition to the above, a girl can abstain for utilitarian purposes, aiming to satisfy her needs (externalized regulation).

The first option is that, having become interested in sports, she can start training hard to qualify for the team for important competitions. If she attributes alcohol to a negative effect on athletic performance, she will prefer to abstain.

The second option is that, upon entering college, she can begin to closely interact with a group of students who lead a healthy lifestyle. If her friends treat those who drink without respect, she will tend to abstain (at least while she is in college) to satisfy her needs for respect and acceptance.

The third option is that, after graduating from college, she may aspire to become a mother. Taking care of the health of the unborn child, she can begin to abstain a few months before conception, and return to drinking again after the birth of the child.

It can be observed that human behavior regulated through externalization is more autonomous than behavior regulated externally. Simultaneously, the girl does not consider abstinence to be truly important, and she does not view drinking as shameful. She chooses not to drink only as long as she believes that abstinence is beneficial to her because it helps her satisfy certain needs. If she unexpectedly gets injured and cannot qualify for the team, finds another company in college, or postpones the birth of a child, the reasons for abstinence will immediately disappear. Externalized regulation, unlike internalized regulation, does not involve the assignment of norms, values, and behaviors. The person attributes the ability to satisfy certain

needs to specific objects (in our case, sobriety. Therefore, the behavior is purely utilitarian in nature.

Methodological optics for the description of externalized regulation

It has been previously shown that scholars across various disciplines, such as physics, biology, and psychology, use only four universal heuristics when describing fundamentally different types of interactions (Nikolaev, 2023). The first one, Hypotheses-non-fingo, involves favoring mathematical descriptions over scientific ones. The second heuristic, Direct-interaction, involves scientifically interpreting phenomena and describing interactions within a simple framework where one object or subject directly influences another. The third heuristic, Indirect-interaction, proposes a more complex model of interaction by introducing a hypothetical agent that mediates the interaction. These three heuristics presuppose the existence of an external world that is independent of the perceiving subject. The fourth heuristic, Mind-construct, posits that we cannot explore a world beyond our own experiences. It suggests focusing on studying the reality existing in the human mind where the outcome of an interaction is not perceived but rather constructed by a person.

Analyzing the regulatory styles of external motivation from the point of view of utilized heuristics, one can see the following.

When describing external regulation, researchers resort to using Hypotheses-non-fingo heuristic (Nikolaev, 2023). This suggests that when describing the process of motivation, researchers tend not to use concepts that characterize psychological, mental reality. In their proposed scheme of human activity regulation, the external world directly influences behavior. When describing external regulation, R. Ryan and E. Deci draw upon the work of behavioral psychologists, particularly operant theorists, who maintained that all behavior depends on external contingencies for its reliable occurrence (Ryan, Deci, 2017). It should be noted that the authors of SDT are attempting to unify the theories and terminology they use to some extent in their works. They attempt to modify some of the statements of Skinner's radical behaviorism by introducing terms that characterize mental reality: "Quite simply, we suggest, reinforcing events change response rates precisely because they satisfy physiological drives or psychological needs. Skinner, for example, used food to reinforce his pigeons (typically after depriving them), but to our knowledge he never attempted to use a gold star or a dollar bill with this organism. He thus intuitively knew about needs, even though they were not discussed as such" (Ryan, Deci, 2017, p. 106–

107). These “improvements”, which introduce irremediable contradictions into Skinner’s theory, do not appear to be sufficiently justified.

When describing internalized regulation styles R. Rian and E. Deci rely on psychoanalytic theories (Ryan, Deci, 2017). They adopt from psychoanalysis the concept of internalization, which characterizes the appropriation of external norms, behaviors and values. Simultaneously, the degree of assignment may vary. In addition to psychoanalysis, SDT utilizes Kelman’s concept of conformity, which includes three conformity types – compliance, identification, and internalization (Kelman, 1958). R. Rian and E. Deci mention that their use of the concept of internalization differs from its use by Kelman, as well as some psychoanalytic usages (Ryan, Deci, 2017). In terms of heuristics, all versions of the internalization concept use the Indirect-interaction heuristic (Nikolaev, 2023). In other words, scholars suggest that the outside world cannot directly influence the human mind (motives, needs, etc.). There is an intermediate link mediating such an impact. In this case, elements of the unconscious (introjects, identifications, defense mechanisms, sets, etc.), which were formed as a result of the internalization of certain external factors, act as this mediating agent.

The concept of externalized regulation that I propose assumes a fundamentally different description of how human activity is regulated. In terms of heuristics, this refers to the Direct-interaction heuristic (Nikolaev, 2023). In this case, the outside world directly affects the human mind. Such an impact can be described, for example, using the term “needs”. Certain external material and immaterial objects can directly satisfy, deprive or transform human needs. Accordingly, a person strives to get some objects, and tries to avoid others by all means. In order for initially neutral objects to receive such power, it is necessary that a person externalize, ascribe to them a certain significance. If Skinner’s Radical Behaviorism was used to describe external regulation, and psychoanalysis was mainly used for internalized regulation, then Lewin’s Field Theory could be used for externalized regulation (Lewin, 1935, 1936, 1951).

In the field of employee motivation, the difference between the three types of regulation is very transparent. The concept of external regulation is used in theories that focus more on stimulation rather than motivation. Typically, such approaches assume that the influence on employees is not personalized, and their individual psychological characteristics are not taken into account. Examples of such concepts include Reinforcement Theory and Mayo’s Human Relations Theory.

Content theories are grounded in externalized regulation. They assume that a person, with a specific hierarchy of actual needs, strives to satisfy

them through their work activity. Certainly, the motivating effect should be personalized and should take into account the individual's hierarchy of needs. Among such concepts, we can distinguish between McClelland's Three Needs Theory and Herzberg's Two-Factor Theory.

The idea of internalized regulation is used by various process theories of motivation. These theories discuss the subjective perception and assessment by employees of both the overall work activity and its individual characteristics, such as equity in the distribution of rewards, the probability of success, and the ratio of expected rewards to costs. In other words, these theories deal with sets and values. Examples of such concepts include Vroom's Expectation Theory and Adams' Equity Theory.

Conclusion

As mentioned earlier, in SDT introjected regulation is closely linked to projection and is partially based on it. By regulating one's activity through introjection, a person projects their own attitude onto others, imagining that these others will either approve or disapprove of their behavior. This implies that one can observe the sequential use of two types of regulation here – externalized and internalized. In this case, regulation is initially externally mediated and then internally mediated.

The combination of externalized and internalized regulation may not be two-stage, but multi-stage. Different styles of regulation may be repeatedly intertwined in various combinations over a long period, sometimes, perhaps, throughout one's life. For example, a certain norm may be consistently internalized and externalized (internally and externally mediated) repeatedly, thereby partially transforming.

However, a person may externalize not only norms and behaviors but also values, pleasure and interest. The communication partner or the environment merely serves as an external container for logistical operations involving one's mental content. They act as mediators for intrinsic or internalized regulation. It can be seen that from this point of view it is impossible to speak definitely about the nature of regulation when the involved styles of regulation are based on externalization or internalization.

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Экстернализация как механизм вынесения вовне и приписывания личностью внутренних феноменов внешнему миру традиционно привлекает внимание исследователей, работающих в русле различных школ и направлений психологии. Например, в современной когнитивной науке и когнитивной психологии на передний план выходят представления об экстернализации в форме предвосхищения как основном механизме познания. Исследователи продемонстрировали, что механизм предсказывающего кодирования относится не только к восприятию, но и может лежать в основе описаний того, как функционирует человеческий мозг в целом. В статье обосновывается целесообразность введения понятия экстернализации в теорию самодетерминации Р. Райана и Э. Дисп. Универсальный характер экстернализации в процессе присвоения и воспроизводства общественно-исторического опыта подразумевает, что активность человека часто регулируется не реальными внешними вознаграждениями, наказаниями, образцами поведения, нормами и ценностями, но его предположениями и гипотезами о них. При этом степень обоснованности таких гипотез может варьироваться в широком диапазоне. Это логически приводит к введению в теории самодетерминации континуума экстернализации, аналогичного континууму интернализации. Можно заметить, что поведение человека, регулируемое посредством экстернализации, более автономно, чем поведение, регулируемое внешне. В то же время экстернализованная регуляция, в отличие от интернализованной, не предполагает присвоения норм, ценностей и образцов поведения. При экстернализованной регуляции

человек приписывает конкретным объектам способность удовлетворять определенные потребности (опредмечивает их), соответствующее поведение оказывается чисто утилитарным по своей природе. Одни и те же ценности и образцы поведения могут подвергаться многократным циклам экстернализации и интернализации, что во многих случаях затрудняет дифференциацию различных типов регуляции.

Ключевые слова: теория самодетерминации, экстернализация, мотивация, деятельность, теория предсказывающего кодирования

Для цитирования: Николаев, Д.Е. Теория самодетерминации и континуум экстернализации // Новые психологические исследования. 2023. № 4. С. 67–79. DOI: 10.51217/npsyresearch_2023_03_04_04

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