



Research Article

## DIFFERENCES IN STUDENTS' VOLITIONAL REGULATION AND WILLPOWER ACCORDING TO EDUCATIONAL DIRECTIONS

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**Yuldasheva Nilufar**

**Doctoral Degree Student Of Psychology Department, Social Sciences Faculty National University Of Uzbekistan Named After Mirzo Ulugbek, Uzbekistan**

### ABSTRACT

This article provides theoretical information about will and volitional regulation. Through our research, a study was conducted to study the will regulation and will power of students studying in different educational fields. The general differences in the level of subjective control and willpower of the students of each course were studied, and their results were recorded in the article. According to the results, the students of natural science recorded high indicators according to two methods.

### KEYWORDS

Volition, volitional regulation, regulation, willpower, will, voluntary action.

### INTRODUCTION

Willpower is one of the most complex concepts in psychology. Will is considered both as an independent mental process and as an aspect of other basic mental phenomena, as a unique ability of a person to voluntarily control his behavior. Will is a mental function that literally permeates

all aspects of human life. In the content of volitional action, three main features are usually distinguished, which ensure the appropriateness and orderliness of human activity. According to scientists, a voluntary act is a conscious, purposeful action, with the help of which a person



achieves a goal, subjects his impulses to conscious control and changes the surrounding reality according to his plan.

Will, as a person's ability to control himself, makes him relatively free from external conditions, turning him into a truly active subject. Will is a person's conscious overcoming of difficulties on the way to achieving a goal, when faced with obstacles, a person refuses to move in the chosen direction or increases his efforts, and the ability to find strength in himself to overcome the difficulties encountered is precisely an important psychological aspect of volitional regulation in a person. As predictors, takes the lead in practical life activities. Based on the purpose of our research, we will continue our work with the review of empirical indicators to determine the psychological determinants of volitional regulation in students studying in different areas and fields.

## LITERATURE REVIEW

Voluntary movement is important for human life. According to U. James, voluntary actions are more dependent on internal processes than external processes, both easy and difficult to understand [25]. Volition is interpreted as a set of voluntary actions that are distinguished from other actions by neurocognitive processes. When studying the classical problem of will, the question arises whether there are special neurophysiological processes of it [17]. If it really exists, it is necessary to logically study the factors and consequences affecting these processes. It refers to specific information that illuminates volitional action through such research. Certain characteristics are necessary for the formation of voluntary action. Sylvia Seghezi and Patrick Haggard, who considered these properties

combinations to be properties of volitional action. Volitional action is generated internally rather than as a result of external influences, actions are goal-directed rather than habitually "response-outcome", actions are under conscious control, or at least they occur under veto control P.Haggard describes these features as follows.

- Internal reason. This concept can be viewed in contrast to stimulus-driven motor responses such as reflexes or rapid automatic responses to salient environmental stimuli. According to this view, the occurrence, timing, and form of a voluntary movement are not directly controlled by an identifiable external stimulus. Instead, information is created within the individual to enable action.

- Decision control; actions are not routine, not automatic. Voluntary actions do not occur stereotypically and automatically like habitual, routine actions performed without any cognitive involvement. Voluntary action refers to the process of actively planning and choosing alternatives that are not habitual actions.

- Goal orientation. Voluntary actions are usually considered to be purposive and done for a reason (in philosophical terminology, responding to reasons). On the face of it, the intrinsic motivator of an action is simply an expression of the desired goal state that produces the action.

- Includes consciousness. Voluntary actions are usually accompanied by the experience of consciously "intending" and directing the action to its goal [7].

When we look at human actions, there is a fundamental difference between reflexes and voluntary actions. Reflex actions are completely out of our control. For example, we can't shrink



our pupil just by thinking, and we can't stop it from shrinking when it's illuminated. In contrast, voluntary action involves action that we can choose to do (or not do) deliberately and only through thought. Of course, there are activities that lie between these two extremes. For example, we cannot stop a movement that occurs as a reflex response to blowing air into the eye, which is an example of a reflexive movement. Yet we experience most of the actions in our daily repertoire voluntarily [17]. However, defining voluntary behavior as behavior over which we have control leads to many deep philosophical problems. In what sense do we control our behavior? Does such control presuppose the existence of rational reason and free will? Is free will compatible with a materialist approach to the study of behavior? Is this truly free behavior unique to humans? I believe that most of these problems arise from mixing different views of the movement. There are two ways of looking at voluntary action [24]. If we want to study non-communicative animals or humans, then we must define voluntary actions on the basis of behavior. But, through introspection, we can also define voluntary action in terms of experience. As we can see, these two views are very different about voluntary actions. The above two ways are divided into types such as a first person's point of view and third person point of view [30].

For an outside observer, the main characteristic of a voluntary action, as opposed to a reflex, is that the voluntary action cannot be fully predicted from the previous context. This means that if behavior is not determined by external events, then the choice must be made "from within", endogenously. The issue of predictability has played a major role in the design of many experiments that have attempted to manipulate the degree of volition associated with movement.

For example, in one case, the subject's responses may be entirely influenced by an external stimulus (press the left button when the red light is on). In another case, an action is performed by the subject's own choice without external influences (when the light is on, press the button you like). In this latter case, each choice is not determined by any external stimulus and is not easily predictable [18]. In both cases, the actions are clearly voluntary because subjects can choose not to follow the experimenter's instructions, but assuming that the instructions are followed, the second, unconstrained condition is more clearly voluntary and "free" than the first [22]. Libet's classic experiment on "free voluntary movement" is based on the same principle, except that the precise timing of the movement is chosen by the subject and difficult to predict [19,20]. When subjects have to make a free choice, activity is typically observed in the dorsolateral prefrontal cortex, a region involved in selecting actions when there are a number of competing options. By definition, the greatest unpredictability is achieved by making random choices, and truly random behavior is considered "freer"[14]. Thus, because free choice is associated with unpredictability, performing a task in which subjects are specifically instructed to try and generate a random sequence is identical to "free choice" tasks. not surprisingly, it causes activity in brain regions [21].

## RESULT

The purpose of the research conducted by us is to study the specific aspects of volitional regulation in students of a higher education institution studying in the field of specific sciences, the existence of differences according to their educational direction. We divided all students in tree category that exact sciences, natural sciences



and socio-humanistic sciences. The table below shows the number of respondents and their percentages, according to which the total number of respondents is 456, of which 190 are exact

sciences (41,7%) and 114 are natural sciences (25,0%) and 152 are socio-humanistic sciences. The object of the study is a group of students who are all studying specific subjects.

**Table 1**

Nº	Directions	Numbers	Percentage
1.	Exact Sciences	190	41,7%
2.	Natural sciences	114	25,0%
3.	Social and humanitarian sciences	152	33,3%
4.	Total:	456	100,0%

**Table 2**

**Analysis of differences in the cross-section of directions according to the Kraskel-Wallis criterion of Dj. Rotter's "Subjective control level" methodology (n=456)**

Nº	Indicators	Average color			Statistic value	
		Exact sciences (n=190)	Natural sciences (n=114)	Socio-humanistic sciences (n=152)	H	p
1.	General internality	229,02	232,41	224,91	,216	,897
2.	Internality in success	227,09	229,53	229,50	,038	,981
3.	Internality in failure	232,34	216,19	232,93	1,333	,514
4.	Internality in family relationships	229,11	231,65	225,38	,155	,925
5.	Internality in industrial relations	227,34	232,87	226,67	,171	,918



6.	Internality in interpersonal relationships	226,38	237,01	224,76	,653	,722
7.	Internal health	226,48	220,14	237,29	1,190	,551

**Explanation:  $p > 0,05$** 

We can see that the analysis of the differences in the section of directions according to the Kraskel-Wallis criterion of Dj. Rotter's "Subjective control level" method was as follows, the important point was that despite the fact that the directions differed in all these indicators, there were no significant differences in the level of confidence between the results of our testers. In particular, in general internality, i.e., the characteristic of individuals who take responsibility for their own actions and events, students studying natural sciences have a relatively high advantage, which is due to the fact that they "pull out their grip" we can also explain it by the high level of patience in the chase ( $H=0.216$ ,  $p \leq 0.897$ ). At the internal level of success ( $H=0.038$ ,  $p \leq 0.981$ ), different aspects are observed in students studying natural sciences, and in these students, "not losing oneself" in the face of news and success, and moving forward with confidence are among the character traits of these students. we can describe it as absorbed through the lim process.

In case of failure, the opposite result was observed according to the indicator of internality ( $H=1.333$ ,  $p \leq 0.514$ ), a clear advantage was found in students studying social and humanities, and this is the result of their "deep devotion to their inner experiences" similar to the saying "when angry, the mind goes", we can also consider it as a product of human feelings "failing to control" emotions in the process of humanizing education. Internality in family relationships means that a

person can control himself in various situations in the family, "refrains" from emotional actions ( $H=0.155$ ,  $p \leq 0.925$ ). According to this scale, the advantages of the students of the natural sciences were determined, because their ability to work on a problem until the result was transferred to family life, they took the position of "objective" assessment of difficulties and misunderstandings faced in the family - destructive conflicts that lead to various unpleasant consequences. it turns out that it can serve as a "key" to prevention.

Industrial relations ( $H=0.171$ ,  $p \leq 0.918$ ) and internality in interpersonal relations ( $H=0.653$ ,  $p \leq 0.722$ ) also showed an advantage in students studying in the field of natural sciences, while lower indicators were observed in students studying in social and humanitarian fields. we can see that it is known to be recorded in the results. This aspect can be attributed to the high motivation to engage in work that gives more aesthetic pleasure, without gaining much importance in the professional activities of students studying in social and humanitarian sciences in the technical support of cooperation between science and practice, production relations, and on the other hand, "to talk We can also characterize it by the fact that the principle of "quick answer to a quick question" leads the communication process, less following the principle of "seven measures and one person" when entering into a discussion with individuals.



There were no significant differences between the results of the test subjects in terms of other indicators of this methodology, and these aspects show that students are equally responsible for the events in their family life, their actions in organizing production activities, developing relationships in the team, an important factor in their own development, and managing their

informal relationships with other people. , capable of arousing respect and sympathy for themselves, allows us to evaluate them as a result of the similarity of views in which they consider themselves mainly responsible for their health (if they are sick, they blame themselves for it, and recovery largely depends on their own actions).

Table 3

**Analysis of differences in the cross-section of directions according to the Kraskel-Wallis criterion of N.N. Obozov's "Assessment of Willpower" test (n=456)**

№	Indicators	Average color			Statistic value	
		Exact sciences (n=190)	Natural sciences (n=114)	Socio-humanistic sciences (n=152)	H	p
1.	Assessing of willpower	252,58	277,03	162,00	60,793	,000***

**Explanation:  $p < 0,001$**

As a result of the analysis of the differences in the cross-section of directions according to the Kraskel-Wallis criterion of N.N. Obozov's "Assessment of Willpower", it was 252.58 for students of exact sciences, 277.03 for students of natural sciences, and 162.00 for students of social and humanities. was revealed ( $H=60.793$ ,  $p \leq 0.001$ ). From this result, it appears that students studying natural sciences have a higher individual character.

According to the methodology presented above, low, i.e., lower indicators emphasize the weak development of volitional feelings in the test subjects and indicate that a person can be easily convinced in this aspect. It is known that the students of social and humanitarian sciences have

a real perception of their "delicate", "weak" areas and have the will power to correct these shortcomings. In order to do this, it became clear that they need to improve their voluntary regulation and practice their skills of working on themselves more.

The results of students studying specific subjects are recorded with average scores according to the indicators of the methodology, in which it is proved that the will power is average. They act differently in different situations, and in some situations, they tend to give way due to the demands of the situation, and in some cases, they tend to show the opposite - determination and patience. It is this situation that affects the increase in the level of pleasantness in



communication, education and work activities among students of this direction. Natural sciences students have high will power. It allows us to draw conclusions that their high level of volitional control can serve as a "leading factor" in interpersonal relations, professional activity and successful completion of tasks.

Based on the scope of importance of the course, it can be said that they have higher self-confidence and voluntary self-education due to the fact that they are designed to perform more tasks and tasks individually, requiring individual skills, while the situation is the opposite for students studying in social and humanitarian fields. more cooperation, communication, group-collegial work in educational tasks, implementation of measures prevails. It is these factors that develop a sense of confidence in the collective strength of the team rather than one's own strength in students studying social and humanitarian fields, reduce the weight of individual volitional levels, and encourage the formation of a feeling of "dissatisfaction" in relation to time-consuming tasks.

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