Study concept as a metaphor from the lenses of university students

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ABSTRACT

This research aimed to examine the meanings attributed to the concept of studying in line with the opinions of university students. As one of the qualitative research methods, phenomenology design was used. Convenience sampling technique was used to determine the study group. 353 senior university students, studying at Inonu University in the 2020-2021 academic year, were included in the study. Data were obtained with a form containing an explanation about the research and metaphor that was sent to the students electronically. The content analysis technique was used in the deciphering of the data obtained in the study. Results showed that the university students produced 191 different metaphors about the concept of lesson studying. When the metaphors created by university students were categorized thematically, 14 different categories were identified. In terms of frequency, metaphor concepts are grouped under categories such as being painful, enlightening the future, being a basic need, being dependent on labor, being instructive, addictive, obtaining a product, being a task, entertaining, being the key to success, being comforting, beneficial, being continuous and valuable. It was found that almost twenty-five percent of university students perceive studying as torment and torture. At the end of the research, suggestions were made on the subject in line with the findings.

Keywords: Study, metaphor, university students, task.

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INTRODUCTION

Development and learning is a lifelong process. In this process, the person tries to realize himself/herself by recognizing his characteristics such as interest, ability, and personality. The developing perceptions of students that develop can take different paths in line with their lives. While perceiving events or concepts, conscious, unconscious, common and individual learning efforts and social conditioning can affect human perception (Yalçın Wells, 2015). Therefore, the concept of studying is a phenomenon that leaves an important mark on students' lives and plays an active role in their success. This phenomenon is about the learning process of students.

Education researchers concentrated their studies around such questions, "How can we improve learning environments? How can we make learning more permanent? How can we eliminate learning deficiencies? How can we make students' minds more active and creative thinking?" Concepts and the teaching of concepts have become an important point of education. There is a truth to understanding, conceptualizing, reasoning, and recognizing the importance of questions about the nature of language. One of these realities is the function and importance of metaphors in efforts to make sense of the universe (Kurt, 2019). Thus, people's perceptions of the universe or phenomena can be seen concretely through metaphors.

Metaphors implicitly convey information in the mind. Metaphors provide a relationship between two different concepts. The relationship between these two concepts can be provided by the fact that a concept has an aspect similar to another concept. Metaphor takes place in a figurative way, by analogy or comparison. This situation, which is also expressed as explaining the concepts in mind with a different scheme, may not always be in the form of an analogy. Therefore, a relationship is established between two concepts that are not similar to

each other through metaphor. Metaphors, which are a thought system that help to comprehend the world, strengthen individuals' ability to express themselves. Concepts that are perceived as abstract through metaphors can be explained with a concrete concept in mind. Just as metaphor gives us a picture of the truth, it is also a means of "affordance or creating the truth" for community members. Therefore, metaphor reflects the "subconscious" of society, individual or a particular community. Organization theories have been interpreted through metaphors. While metaphors present a visual, rich image about the subject, they express the data in a more concrete way by putting them in an understandable form. Sometimes, it uses simulations while revealing differences, sometimes through open or closed metaphor (Yıldırım and Şimşek, 2016). In this way, metaphors can make the invisible to visible. It can help people to understand themselves and their environment better.

Metaphor

The word metaphor has emerged with the differentiation of the Greek word "metapherein". Meta means "to change, above" and pherein to "carry, transfer" (Levine, 2005). Metaphor is described as the meaning of a concept or phenomenon much more than it expresses itself (Cebeci, 2013; Uyan Dur, 2016). Metaphor can be defined as describing a concept by likening it to another concept, phenomenon and explaining through it.

Metaphors are a way of perceiving the world we encounter. Explain our perspectives on the world. How we think about things, how we make sense of reality, and how we set up the problems that we later try to solve. In addition, human thought processes are largely metaphorical and the conceptual system of human is metaphorically structured and defined (Johnson, 1981; Black, 1955; Schon, 1979; Reddy, 1979; Lakoff and Johnson, 1980; cited in Munby, 1987).

Expression style with metaphors started to be used by ancient philosophers and has continued until today. Many philosophers have benefited from the art of metaphor in the history of philosophy to express themselves better. These metaphors used by philosophers can be found in many fields such as religion, art, morality, politics and metaphysics. The need for philosophers, who dealt with mostly abstract subjects, to express their thoughts more clearly to their interlocutors made it necessary to use metaphors in their works (Kutluay, 2009). As a matter of fact, proverbs and idioms appear as examples of this style from the writers, poets and wise men of the past.

The term metaphor, which is assumed to be used mostly in the field of literature as a way of expressing a thought, object or action, is actually a linguistic metaphor phenomenon that individuals frequently use in their daily lives (Güveli et al., 2011). Metaphors are ubiquitous in communication and have effective meanings for people (Creed and Mcllveen, 2018). The metaphor, which

supports the creation of new meanings by developing sophisticated understandings of new, compelling or esoteric structures by making use of conventional, concrete reference points, is an innovative thinking based on both linguistic and conceptual forms (Lynch and Fisher-Ari, 2017). This mentality is transferred from generation to generation in the society through education, and even metaphors are used in educational practices.

Metaphors are also used in various fields of education. In the field of educational administration, metaphors are used in curriculum development and planning, and in teaching areas such as creative thinking and encouraging learning (Bahadır and Özdemir, 2012). In this way, the opportunity to learn the perspectives of students can be obtained through metaphors. Because metaphors provide information about persons' perspectives and perceptions (Girmen, 2007). Thus, if the literature is examined, it is seen that studies are frequently conducted through metaphors to determine the perceptions of university students (Northcote and Fetherston, 2006; Patriotta and Brown, 2011; Wegner and Nückles, 2015; Köseoğlu, 2017; Erdem, 2018; Kahu and Picton, 2020). The concrete determination of students' thoughts through metaphors is an application that can be used to improve educational processes.

Study

Many variables are effective in achieving the desired level of success in education. Among these, the quality of the teacher, the physical characteristics of the teaching-learning environment, the teaching approaches applied in the process, the features of the study material can be listed. In addition, there are characteristics stemming from the student. The most important of these is that students do not have effective learning and efficient studying attitudes and habits. The level of competence regarding students' learning skills appears as a determining factor on their school success. In order for students to increase their academic development, they need to make an effort and study outside the classroom (Tümkaya and Lili, 2006; Çuhadar et al., 2013). Students' thoughts about all these variables are an important factor.

One of the most important factors affecting students' school success is the study strategies and attitudes of the students (Erdamar Koç, 2010). Some students do not succeed despite devoting much time to studying. This shows that students' studying skills are insufficient. Students who have gained the habit of studying efficiently have a more positive attitude towards school. Students' attitudes towards studying can be associated with study strategies. When students have to work, their attitudes at school and overall motivations have a huge impact on school success. While studying is defined as the effective use of certain behaviors and techniques for learning (Sara, 2012), task is defined as frequently given by the instructors at all levels of education for reasons such as

reinforcing the subject in the course, completing the missing parts of the course, making preliminary preparations for the new subject or preparing for the exam (Akan, 2020). In this process, how students do is important as well as what they do, and these are needed to be determined.

Study habits are learning tendencies that enable students to work privately (Nneji, 2002). Study habits affect students' learning abilities, and technology devices play a very important role among factors that can condition their study habits (Poscia et al., 2015). Studies that examine how students view their studying methods within the framework of their values offer additional insights into the explanation of different achievements in higher education (Entwistle et al., 1974). Thus, it should be determined that the reasons for what and how they did.

One of the factors that affect a person's learning is studying effectively. So, one of the subjects studied is what the aims of the students are in the teaching environment during the learning act. In other words, while some learners set out to fully understand the subject, others only participate in learning activities for the purpose of passing a lesson (Yılmaz and Orhan, 2011). Therefore, in addition to learning and studying approaches, one of the important factors related to learning is the beliefs of individuals about knowledge and learning, known as epistemological beliefs (Topkaya et al., 2011). Therefore, it can be said that action and intention are intertwined.

Studying is seen as a very important concept in the education life of students. Individual students' perceptions of the concept of studying may differ. Whether these perceptions are positive or negative, they can affect their learning, their education life, motivation, academic achievement. That is, all their educational actions are affected positively or negatively. For example, it is observed in Turkish culture that the "cow" metaphor or "cow" figure is widely used in relation to how studying is perceived by students. Accordingly, we can say that the "geek-cow" simile is a metaphor that prevents students from studying the lessons and it prompts students to inaction in order not to be nerds. In this context, determining the metaphors related to the concept of studying is thought to be effective tools in determining the possible obstacles in front of students' studying. For these reasons, it is important to identify students' perceptions of the concept of studying and to reveal these perceptions with their reasons.

Purpose of the study

It is thought that university students' perceptions of studying is important for their academic performance. The focus of the study is to reveal students 'perceptions about studying and assignments with metaphors, and determining what the effective variables are on students'

views on the subject through concepts, and thus determining their perspectives towards studying. Because university is the last step of formal education life of people. Also students are grown-up and manifest one's individual existence at that ages. Moreover, students who are in college known as hardworking. Within this framework, the aim of the study is to determine university students' perceptions of the concept of "studying" through metaphors. Accordingly, answers were sought to the questions below:

1. Which metaphors do university students use to explain their the concept of studying?
2. For the concept of studying, under which categories are metaphors collected in terms of similar features?

METHODOLOGY

Research model

In this study, phenomenology design, one of the qualitative research designs, was used in line with the purpose. Phenomenology design is used to illuminate the cases that we are aware of but want to determine in depth and with their reasons (Yıldırım and Şimşek, 2016). Phenomenology is a research design that tries to understand more people's inner world and their consciousness structures (Mayring et al., 2011). In this pattern, it is investigated how persons perceive, explain, remember, and interpret a phenomenon and what kind of language they use to convey this phenomenon to people (Patton, 2014).

Population and sample

In the determination of the study group, convenience sampling technique, which can be easily found among sampling methods with unknown probability, was used. With this technique, in determining the participants, a random sample large enough to represent the universe is selected from a universe. With this technique, in determining the participants, individuals who are related to the research subject and the people that the researcher can reach are generally used (Yıldırım and Şimşek, 2016). In line with the purpose of the study, a study group was determined that includes students who are knowledgeable about the concept of studying and who study at İnönü University because they have more experiences with studying and are easily accessible by the researcher. In this context, a total of 391 university students studying at İnönü University in the 2020-2021 academic year were reached as the study group of the research. However, 38 participants who filled in the form incorrectly were eliminated and the remaining 353 forms were evaluated (Table 1).

Table 1. Demographic information of participants.

Variables	Category	N	%
Gender	Female	272	77.2
	Male	81	23.7
Grade Level	1. Class	77	21.7
	2. Class	127	36.1
	3. Class	78	22.3
	4. Class	71	19.9
Total number of students		353	100

Data collection and analysis

An online form with personal information was created to get data. Participants were asked to complete the sentence with "Studying is / is similar… because…". Content analysis was used in the analysis of the data obtained in the study. The data collected in content analysis are analyzed in four stages. These stages are coding and sorting, category development stage, validity and reliability stage, and interpretation of the findings (Saban, 2008; Kılcan, 2017).

In the first step, in the coding and sorting process, the metaphor-reason relationship was examined and the category of each metaphor was determined in line with the relationship. Concepts with the same metaphor but different reasons are grouped under different categories. For example: "Studying is like life because both are boring (267P)", while the metaphor of life in the sentence was included in the category of "it hurts", the life metaphor in the sentence "Studying is like life because it gives your future (283P)" is included in the category of "shining a light on the future" and "Studying is like life because it always gives us lessons (318P)", the metaphor of life in the sentence "has been taken into the category of "being instructive ". In this way, categories were created based on the metaphor and reason link. In the second stage, the category development stage, firstly, the data obtained from the 353 forms that remained with the eliminated forms were encoded in computer environment and each metaphor image was associated with students' perceptions about the concept of studying. The codes are divided into categories within the framework of similar features related to the concept of studying. In addition, the participants in the study group were coded as P1, P2, P3,…, P353. Direct quotations were given based on the opinions of the participants.

In qualitative studies, the harmony between expert and researcher evaluations should be 90% and above in order to provide a desired level of reliability (Miles and Huberman, 1994). The reliability of this study was calculated by the formula (Reliability = Agreement / Agreement + Disagreement × 100). The research was sent to an expert who previously worked with this method and a comparison was made. As a result of these calculations made for the research, it was concluded that there was a 93% agreement.

In the presentation of the obtained metaphors, "Word Clouds" were used to increase understandability and accessibility by visualizing written responses. Word Clouds present the size of the word in proportion to the frequency of the metaphor. In other words, the program adjusts the size according to the frequency of each word (Bletzer, 2015). The metaphors are presented with the visual of "Traces of torture in the world", since the most frequently used metaphors of torture (f = 14) and the category of torment (f = 87) were found.

FINDINGS

The metaphors obtained for the concept of studying university students in the research are included in Figure 1.

In Figure 1, it is seen that university students produced 191 different metaphors regarding the concept of studying. It was determined that 62 of the metaphors were produced by more than one student. In terms of frequency; torture (f = 14), food (f = 12), labor (f = 11), necessity (f = 10), life (f = 9), dependency (f = 9), work (f = 7), water (f = 7) and winter preparation of the ants (f = 5) were observed. When the mentioned metaphors were examined, it was striking that the number of metaphors obtained was high. The reason for this can be shown that students generally do not agree on the perception of the concept of studying. In addition, based on the metaphors, it can be said that student perceptions are quite negative about studying.

Themes and Categories obtained from university students for the concept of studying are included in Table 2.

In Table 2, the metaphors created by the students for the concept of studying are given as categories. According to the similarity; being painful, enlightening the future, being a basic need, being dependent on labor, being instructive, addictive, obtaining a product, being a task, entertaining, being the key to success, being comforting, beneficial, being continuous and valuable are grouped under categories respectively.

Figure 1. Metaphors produced by university students for the concept of studying.

Table 2. Distribution of the concept of studying according to themes and categories.

Category	Metaphors	M	F	%
Tormenting	(1): Purgatory, the necessity of staying in an environment you do not want, dejavu, visiting relatives, walking uphill, chaos, confusion, thorny road, persecution, dungeon, milky way galaxy, suffering, compromise, challenging task, hell, looking for a needle in a haystack, grave, toothache, mountain, thirst in the salty sea, ungrateful, sea, in vain rowing, forced orient duty, drowning in the sea, labyrinth, waking up from morning sleep, nightmare, unhappiness, taboo, our sins, amoeba, eating the food you don't like, colander, unique, routine works (2): Cow, virus, getting lost, watching tv, life (3): Dying, boring (4): Hard, disease, machine (10): Obligation (14): Torture	48	87	24.63
Shining a light on the future	(1): Achieving goals, horse racing, arriving by ship, ticket, growing, enlightenment, racing, sun, spring, vehicle, project, cooking, philosophy, running water, oil lamp, carpet weaving (2): Boomerang, salvation, doctor, meaning of life, throwing money in the piggy bank (3): Money (4): Life (5): Future plan, ants preparation for winter, light	26	48	13.59
Basic need	(1): Requirement, air, worship, baking soda, need (2): Battery, nutrition, heart, salt, drink water, breath (3): Sleep (7): Water (12): Food	14	39	11.11
To depend on labor	(1): Factory, bird, stonework, construction, garden, flower, break a sweat (2): Action, plowing, stars (3): Plowing fields, working iron (5): Ant (11): Labor	14	35	9.84

Table 2. Continues.

To be instructive	(1):The beginning of the movie, the computer, the newborn baby, the knowledge reservoir, the innovation, the never-ending road, the experiment, the one who knows swimming well, the openness to learning, the fire, the brain training, the scientist, the research, the pomegranate, information (2):Puzzle, training, water drop, candle burning, rain (3): Sports, never ending adventure, life	23	33	9.34
Being addicted	(1): Habit (2): Candy, cigarettes, chewing gum (4): Love (9): Addiction	6	20	5.66
The product is obtained	(1): Harvesting, bread making, wheat grain, fruiting tree, fruit, sowing seeds, watering the seed, needlework, applause, watering the soil, watering the flower (2): Vegetables, growing herbs (4): Tree	14	19	5.38
To be a task	(1): Task, duty, destiny, profession (4): Responsibility (7): Business	6	15	4.24
To be entertaining	(1): Entertainment, jenga game, game, eating dessert, snack, pleasure, rose, heaven, bed, beautiful, driving a car, passion	12	12	3.39
Being the key to success	(1): Stairs to success, believing, self-confidence, self-improvement (2): ladder, good friend, reading, success	8	12	3.39
To be relaxing	(1):Therapy,rehabilitation, satiety, meditation, cleaning, hope, hourglass (2): Art, peace	9	11	3.11
To be useful	(1): Vitamin, milk, popcorn, spare time filling, benefit (3): Medicine, broccoli	7	10	2.83
To be continuous	(1): Take the long road (2): Hour, long road (3): Marathon	4	8	2.26
To be valuable	(1): Diamond hunt, hidden treasure (2): Treasure	3	4	1.13

Note: (1): Each number indicates the frequency of the metaphors that follow it.
M: Number of Methaphors

In Table 3, statements of the students regarding the concept of studying are given. It is seen that the students emphasized torture, winter preparation of ants, farmer, innovation, addiction, watering seeds, profession, snacks, reading books, cleaning, broccoli, clock, diamond hunt in their expressions about studying. Students revealed their perceptions in 14 different categories regarding studying through metaphors. It can be said that these are mostly about daily life, positive and negative perceptions towards tomorrow and the person.

DISCUSSION

This study attempted to explore the perceptions of university students regarding the concept of studying. Also, university students likened the concept of studying using metaphors and explained these simulations. Thus, their perceptions of studying emerged with their own associations and their reasons were associated with metaphors.

Metaphoric language makes sense of discourse by

Table 3. Quotations of the concept of studying by categories.

Category	Sample quotes
Tormenting	"Studying is like torture because you always have to work when you don't want to (67P)".
Shining a light on the future	"Studying is like ants' preparing for winter, because studying is like working like ants. It is to secure our future (211P) ".
Basic need	"Studying is like water because it is one of the basic needs of the mind (381P)."
To depend on labor	"Studying is like a farmer who sows crops, because the more effort, the more rewards is taken (162P).
To be instructive	"Studying is like innovation because it teaches new things every time (147P)."
Being addicted	"Studying is like addiction, because even if you walk away you can't break from it (129P). "
The product is obtained	"The study is like watering the seed, because if you water it regularly, the seed will grow, over time it will yield (29P)."
To be a task	"Studying is like a profession because you fulfill this task every day (238P)."
To be entertaining	"Studying is like a snack, because it brings pleasure as you work (186P)."
Being the key to success	"Studying is like reading a book because when you do, you improve and succeed (199P)."
To be relaxing	"Studying is like cleaning, because if you don't, you will be exposed to an uncomfortable environment, and if you do, you will get bored but the result will be good (114P)."
To be useful	"Studying is like broccoli because nobody likes it, but it's useful (93P)."
To be continuous	"Studying is like hours because it takes constant work to progress (346P)."
To be valuable	"Studying is like a diamond hunt, because its value is realized when it comes to light (209P)."

using it in context. Thus, it is seen that metaphor comes out with ideas, not words. Especially the same words can have different connotations with different metaphorical usage. The spatial meaning of the word here reflects the perception of the person. Language is meaningful when the ideas it expresses are significative. Conceptual metaphors are purposeful when they are grounded (Lakoff, 2008).

The metaphors produced by the students in the study are outnumbering and mostly negative. In similar studies, it was stated that the students' approach to studying varies according to age, gender, success, place of stay, working time, place and time, class level, department, faculty and university (Olpak and Korucu, 2014; Temelli and Kurt, 2010; Şen, 2006; Tümkaya and Lili, 2006). In addition, in another study, it was pointed out that more than half of the university students produced negative metaphors (Erdem, 2018). This result confirms the criticism that students for the university placement system enroll in programs with sufficient scores instead of the programs they want. As a matter of fact, this result would be thought-provoking for the students registered the colleges voluntarily who perceive the lessons and studying negatively.

Another study supports this claim. Accordingly, it was determined that teacher candidates' learning and studying strategies differed according to the variable of willing to choose the continuing department. This difference was revealed as affective characteristics in favor of those who voluntarily educated in the program they studied. In addition, as the academic self increases, the ratio of students to use learning and studying strategies also increases. This perception also differs according to the university (Şen, 2006).

According to another result, it was seen that students did not agree with the concept of studying. As a matter of fact, students preferred to learn on their own, to work independently and to work at home (Gallardo-Echenique et al., 2016). In addition, in some higher education institutions, students may consider the university as a duplication of secondary school. Therefore, it could be stated that their view of studying was different. Such as, some students see the university as a place of entertainment, liberation and socialization (Dalgıç et al., 2012).

In the study, metaphors associated with various categories and categories were determined in line with the answers given by the students to the first question. In the first category, students stated that they saw studying as tormenting. According to this statement, it can be said that students do not enjoy studying and perceive it as a task they have to do because they have to. In the metaphor they associate this situation, it is seen that they mostly choose the concepts used for difficulties in human life such as cruelty, nightmare, death, illness, and torture.

The necessity of the teaching profession is to create love, respect and responsibility in students. The only people who can eliminate these negative perceptions of students in universities are academicians. Studies have shown that attitudes towards studying, self-successful perception, and positive perceptions of instructors are important factors of study strategies. It was found that perception towards school and grade level did not affect the use of study strategy. According to the results of the research, it can be ensured that teacher candidates use a more efficient study strategy by making their attitudes

towards studying and their perceptions towards themselves and their instructors positive (Erdamar Koç, 2010). In another study, it is stated that the web-based assignments performance of the students is more positive than the paper-based assignments performance (Demirci, 2007).

Academicians should motivate students towards the lessons by taking advantage of developing technology. As a matter of fact, the significant relationship detected between studying skills and academic risk taking indicates that studying skills are related to many cognitive and affective variables that affect students' behaviors in the learning-teaching process (İlhan et al., 2013). In another study, it was found that there is a significant, positive and moderate relationship between academic achievement and the frequency of using learning strategies in course study (Uyar, 2008).

In the following categories, it was seen that students had a more positive perception of studying by using more positive concepts such as enlightening the future, basic need, commitment to labor, teaching, addiction, production and task. In the metaphors they associate with this situation, it is seen that they mostly choose the concepts such as oil lamp, food, sweat, knowledge, habit, harvest and responsibility, which are used for the sine qua non of human life.

The most emphasized metaphor in the study, which was conducted to determine the figurative expressions used by university students to define the concept of university, was stated as preparation for life for the future (Dalgıç et al., 2012). Similarly, in this study, the second most emphasized category was determined as enlightening the future.

In line with the answers given by the students to the second question, metaphor usage was determined by associating them with the categories for studying. According to these results, students emphasized the differences in human lives in life by associating studying with meanings such as an undesirable situation, investment in the future, food for the mind, reward for labor, science, inevitable situation, product, work, snack, reading, refreshment, health, time and substance.

Differences in life have an impact on epistemological beliefs. In the research, the existence of a single truth and the beliefs that learning depends on effort and ability are significant predictors of the subject in terms of attitude, motivation, concentration, use of time, anxiety, information processing, choosing main thoughts, study aids, self-testing and test strategies (Deryakulu, 2004).

The importance of creating learner-centered teaching environments within the framework of constructivist learning approach in the contemporary education approach accepted today has emerged. This situation reveals the necessity of lecturers to identify individual differences of their students and to design teaching environments to overcome these differences. In the literature, the learning approach of the individual, unlike

the characteristics such as intelligence, cognitive style and learning style, which are said to be inherent and unchangeable, are defined as a feature that can be changed by the correct guidance of the instructor. For this reason, it is believed that determining which of the deep and superficial approaches students use in their study process will contribute to the creation of effective teaching environments. In this way, the keystone for taking steps towards making students with a surface learning approach become deep learners will be provided (Yılmaz and Orhan, 2011).

CONCLUSION

According to the research results, university students produced 191 different metaphors. The students mostly used the concepts of labor, food, torture, necessity, life, addiction, water and winter preparation of ants. Accordingly, students' metaphorical perceptions of studying can be evaluated in the axis of the effect of concepts on them in real life and the connotation of studying on them. From this point of view, it can be interpreted that labor represents an occupation, food and water are indispensable basic needs for life, torture means exposure to an undesirable situation, necessity represents obligation, the concept of life emphasizes the reality of life, addiction is now the routine of life, and the winter preparation of ants interpreted as having the meaning of preparation for the future. In short, students make sense of studying through the connotations of these metaphors in their lives.

Studying is a necessity for some students so that they have no other chance, it is a basic need they have to do for their own future, for some students it may be a basic need to do only at a minimum level, and for other students it may be a torture they do with family, teaching staff or school force. Considering the metaphorical perceptions in which the effects of studying on students are revealed, some of them state that they do not enjoy studying while others find it enjoyable on the contrary. While some of them perceive studying as a task and routine, some of them refer to their achievements. Also, they may not know how to study or effect of studying. Similarly, it has been determined that teachers who have not received any training on instructional technologies have difficulties in using technology and do not feel themselves at a sufficient level, whereas the perceptions of teachers who are trained to use technology change positively and they want to receive more education (Korkmaz, 2020). In this way, whether students know how to study or how they study can have an effect on their metaphor perception.

The meanings that students attribute to studying through metaphors can be evaluated in the context of their own situation. As a matter of fact, students' perceptions of studying may differ for many variables.

Although the students mostly emphasized 8 concepts, the fact that 191 different metaphors emerged as a result of the research can be explained as the students interpreted the concept in their own way.

RECOMMENDATIONS

Various suggestions can be made on the subject in line with the research findings.

For students who consider studying negatively, the reason for this is determined, and universities can offer their students opportunities such as changing courses, changing departments, or even changing faculties.

Universities can provide training for their students in correct study techniques, scientific researches, assignments and project preparation.

Students should be placed in universities by considering their desires and skills as well as their scores.

According to results, more comprehensive research can be done by taking into account the demographic characteristics of the students through various variables related to the subject.

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