

Attributions and Perception of Success in Online Learning: Causal Dimensionality of Distance Language Learners

Ayşe TASKIRAN¹ 

Abstract: Causal attributions are known as important factors that affect learners' persistence, expectation of future success, motivation and consequently success. This study aims to reveal the perceptions of success, attributions and causal dimension styles of adult learners learning English in different distance education programs in an open education faculty. An open-ended questionnaire and the Causal Dimension Scale (CDSII) were used as data collection tools. The perceptions of success, causal attributions and attribution dimensions of English as a foreign language learners were compared according to their dimensionality styles. The study also aimed to examine participants' dimensionality styles in order to draw conclusions about healthy and unhealthy attribution styles. A questionnaire and the Causal Dimension Scale were administered to 88 volunteer participants who were asked to indicate their perceptions of success and at least one reason behind their perceptions. The results revealed that success-oriented learners outnumbered failure-oriented learners. The most common attributions for success were effort, teacher, and interest, while repeated attributions for failure were lack of effort, lack of interest, and time. Learners who perceive themselves as successful exhibited healthier dimension styles with significantly more internal, controllable and stable attributions. Failure-oriented learners, on the other hand, exhibited more unhealthy styles with more external, stable, and uncontrollable attributions. The findings are discussed in terms of online learning and achievement motivation.

Keywords: Attributions, online learning, causal dimensions, foreign language learning, achievement motivation

Çevrimiçi Öğrenmede Nedensel Yüklemeler ve Başarı Algısı: Uzaktan Dil Öğrenenlerin Nedensellik Boyutları

Öz: Nedensel yüklemeler, öğrenenlerin derse devamını, gelecekteki başarı beklentisini, motivasyonunu ve dolayısıyla başarıyı etkileyen önemli faktörler olarak bilinir. Bu çalışma, bir açık öğretim fakültesinde farklı uzaktan eğitim programlarında İngilizce öğrenen yetişkin öğrenenlerin başarı algılarını, yüklemelerini ve nedensel boyut stillerini ortaya çıkarmayı amaçlamaktadır. Veri toplama araçları olarak açık uçlu bir anket ve Nedensel Boyut Ölçeği (CDSII) kullanılmıştır. İngilizceyi yabancı dil olarak öğrenenlerin başarı algıları, nedensel yüklemeleri ve yükleme boyutları, boyut stillerine göre karşılaştırılmıştır. Çalışma ayrıca, katılımcıların boyut stillerini inceleyerek sağlıklı ve sağlıklı olmayan yüklemeler hakkında sonuçlar çıkarmayı

Geliş tarihi/Received: 24.04.2022 Kabul Tarihi/Accepted: 12.09.2022 Makale Türü: Araştırma Makalesi

¹ Dr. Anadolu University, School of Foreign Languages, aysetaskiran@anadolu.edu.tr, 0000-0003-1913-7296

Atf için/To cite: Taskiran, A. (2022). Çevrimiçi öğrenmede nedensel yüklemeler ve başarı algısı: uzaktan dil öğrenenlerin nedensellik boyutları. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, 19(3), 827-844.* <https://doi.org/10.33711/yyuefd.1108238>

amaçlamıştır. Başarı algılarını ve algılarının arkasındaki en az bir nedeni belirtmeleri istenen 88 gönüllü katılımcıya bir anket ve Nedensel Boyut Ölçeği uygulanmıştır. Sonuçlar, başarı odaklı öğrenenlerin sayıca başarısızlık odaklı öğrenenlerden daha fazla olduğunu ortaya koymuştur. Başarı durumunda en yaygın yüklemeler çaba, öğretmen ve ilgi iken, çaba eksikliği, ilgisizlik ve zaman başarısızlık için tekrarlanan yüklemeler olarak tespit edilmiştir. Kendilerini başarılı olarak algılayan öğrenenler, önemli ölçüde daha fazla içsel, kontrol edilebilir ve istikrarlı yüklemelerle daha sağlıklı boyut stilleri sergilerken; başarısızlık odaklı öğrenenler ise daha dışsal, istikrarlı ve kontrol edilemez yüklemelerle daha sağlıksız stiller sergilemiştir. Bulgular çevrimiçi öğrenme ve başarı motivasyonu açısından tartışılmıştır.

Anahtar kelimeler: Yüklemeler, çevrimiçi öğrenme, nedensellik boyutları, yabancı dil öğrenimi, başarı motivasyonu

Introduction

English language, a medium of both face-to-face and distance education, has become a lingua franca “as a way of referring to communication in English between speakers with different first languages” (Seidlhofer, 2005, p. 339). Consequently, English as a foreign language (EFL) has become a compulsory course in many countries, and it is perceived as a challenge particularly in open and distance learning context. Thanks to developing information and communication technologies, it is possible to teach and learn foreign language at a distance.

The advance of the Internet and communication technologies has resulted in blending online teaching and learning in traditional practices of universities, which has also made open and distance learning (ODL) more engaging (Tallent-Runnels et al., 2006). Singh and Thurman’s (2019) systematic literature review on online learning summarizes research between 1988-2018 in order to come up with a comprehensive definition of the concept. Based on their review, online learning can be defined as online teaching and learning experiences that integrate communication technologies and devices in synchronous or asynchronous contexts in a way that learners can interact with their teachers and peers, engage in collaborative tasks and experience effective, independent learning experience anywhere anytime. Online learning gives everyone the opportunity to receive education anywhere, anytime at their own pace. Paulsen (1993) summarizes these features as freedom of content, space, medium, and access. Over the last couple of decades, higher education institutions have been through digital transformation (Kopp et al., 2019), which has resulted in application of ODL in many institutions. According to Hodges et al. (2020), online lessons need to be adequately planned according to principles and theories, and they should include quality online course design to be effective. Although ODL practices bring about many advantages such as opportunity for individualized instruction (Means et al., 2019), they also lead to some challenges such as reaching out large numbers of students at marginal low cost, increasing the diversity of courses, application of technology, and involvement of private sector. There have also been some challenges regarding adoption of current technologies, lack of professionalism in terms of teaching and management (Prasad, 2018), expensive course teams, inefficient financial support from governments (Daniel, 2019), low computer and internet self-efficacy of learners (Johnson et al., 2018). Some more difficulties can be listed as increasing number of learners, with extremely diverse learner profiles, learning needs, expectations (Lindeman, 2015), and the distinction

between the learner and the instructor. These challenges may result in low motivation, high attrition and drop-out rates or failure in distance courses (Simpson, 2013).

The distinction between learner and instructor, which is inherent in ODL, provides the basis for the learners to work independently, take their own learning responsibilities and make their own work plans. One researcher associated with the terms; independence, autonomy and self-directed learning is Michael Moore. Moore's early focus was on pedagogical issues, and the two-dimensional theory of interactive distance (transactional distance) is based on distance learning and student autonomy (Garrison, 2003, p.162). If a learner is working without any support, the highest distance will occur. Moore describes this as "programs without dialogue and structure" (Moore, 1991). According to Moore, a normal distance learning course should provide opportunities for both structure and interaction (Holmberg, 1995, p.166). The arguments about student autonomy are based on the general situation of adult students in ODL contexts. This usually means that family and work tasks and social obligations should be a priority. Academic studies take place when these tasks permit and when students are prepared physically and emotionally.

Motivation, as one of the critical factors that affects learning (Lim, 2004), is seen as a decisive factor in the persistence of students or giving-up the course (Muilenburg & Berge, 2005). Increasing success motivation may be possible with the identification of the causes of failure and taking measures accordingly. Attribution theory (Weiner, 1972) is precisely the theory that deals with this, the reasons for success and failure. Factors affecting achievement motivation in online learning contexts are difficult to put forward clearly due to the large number of variables in the context. Poor motivation might originate from numerous factors. Therefore, ascribing poor motivation either to learning environment or to a learner attribute might not clearly explain why some learners continue striving for success while others give up and fail in online context.

Review of Literature

Achievement motivation has been a focus of studies in educational sciences for years. Researchers in earlier studies focused on how motivational and cognitive factors interact and how they lead to success when employed together (Linnenbrink & Pintrich, 2002, p. 313). As a "dynamic, multifaceted phenomenon" (Linnenbrink & Pintrich, 2002, p. 313), motivation has been linked to learners' cognitive and affective processes (Brophy, 2010). Many theories have tried to explain the complex and dynamic nature of motivation to learn, yet there seems to be diverse opinions and no consensus related to the topic. While some theorists conceptualize achievement motivation as a perpetual personal trait - which may exist too little or much in an individual- and which is relatively stable (McClelland, 1985), more contemporary theorists claim that there are conscious beliefs and values in the acquisition of achievement, so more recent experiences gain importance (Stipek, 1998). One of those theories that try to explain achievement motivation is attribution theory. Attribution theory focuses on perceived causation (Weiner, 1972), "attribution referring to the perception or inference of cause" (Kelley & Michela, 1980, p. 458). Weiner (1972) defines attribution theory as the interpretations of the causes of outcomes by individuals. These interpretations are considered to be critical factors affecting future outcomes. Basically, the theory focuses on the individual's judgement of why a particular incident occurred and how these interpretations affect the subsequent action (Weiner, 1972, p. 202).

Bernard Weiner, as one of the most important educational psychologists, associates attribution theory with academic achievement. Weiner has developed Rotter's (1966) only internal-external locus of control dimension by dividing it into three distinct dimensions: locus, stability and controllability. The locus dimension refers to the source of the cause (internal, external), the stability to continuity of the cause, and the controllability dimension refers to whether the individual has control over the cause (Stipek, 1988). For example, while ability and effort are considered internal reasons for success, ease of work or help of others are considered external reasons. Some reasons, such as mathematics, are perceived as stable, while others, such as luck, are perceived as unstable or temporary. Finally, reasons such as effort can be voluntarily changed with the control of individuals while others, such as luck and ability cannot (Weiner, 2000, p. 4). According to relevant literature, attributions might differ according to different contexts, different cultures, and different individuals as well. Nevertheless, it is still possible to make quantitative comparisons of causal dimensions. Locus of causality, stability and controllability dimensions are used to argue that these attributions may lead to healthy or unhealthy future behaviors (Dresel et al., 2005).

When people try to understand the reasons for their success or failure, they make some explanations or judgments and make some attributions while doing so. The dimensions and orientation of the attributions affect people's feelings, beliefs and self-esteem. As a natural consequence of this, people can exhibit certain beliefs, attitudes and behaviors. If the causal burdens on success or failure determine success, changes in these beliefs logically will create changes in success behavior (Feshbach & Weiner, 1991, p. 505). Learning more about attributions of learners might help to make necessary changes related to their negative ascriptions in order to keep their motivation at a high level.

When considered from the ODL perspective, achievement motivation of adult learners might be affected by various factors, most of which are peculiar to online learning and adult learners' characteristics. Online learning is often challenging for adult learners who are employed to balance their work and education lives (Dumais et al., 2013; Joo, 2014), and other frequently reported challenge for those learners is related to domestic problems such as low-quality internet connection (Kahu et al., 2014), limited physical environment for studying (Selwyn, 2011), distractors in the household (Zhang & Krug, 2012), lack of family support (Willging & Johnson, 2009).

Purpose and Significance of the Study

Many studies in the field have revealed that attributions have cognitive and affective consequences that affect learners' achievement motivation, persistence, and expectancy of future success directly (Meece et al., 2006; Pintrich & Schunk, 2002; Weiner, 1985, 2000; Williams et al., 2001). A considerable body of research focused on learner attributions (Tang et al, 2011; Tulu, 2013; Williams et al., 2001; Williams et al., 2004), relation between attributions and achievement (Pishghadam & Zabihi, 2011), attributions and self-efficacy (Hsieh & Schallert, 2008), and attributions and causal dimension patterns (Dresel et al., 2005; Weiner, 1985). Lei and Qin (2009) mention the three categories of achievement attribution studies:

“1) the researchers hypothesize certain settings of academic success or failure and ask the subjects to self-report reasons for the success or failure, followed by the subjects’ self-assessment of attributional dimension of the reasons...

2) The subjects are required to choose out of the reasons presented by the researchers that are in accord with the factuality of their academic success or failure...

3) Interview, diary-writing or autobiography approaches are employed (Lei & Qin, 2009, p. 30)”

This study differs from the above-mentioned first two categories as it intends to ask about the perception of success to the participants directly without generating hypotheses. Based on their perceptions of success, the participants are asked to self-report reasons for the success or failure rather than selecting from the list of predetermined reasons presented to them. Considering the context and individual-specific nature of the attributions, enabling participants to list the causes of their outcomes themselves could make the findings of the study stronger. Like the first category studies, this study also lets self-assessment of attributional dimension of the reasons. More importantly, when studies on achievement attributions are considered, there seems to be not much research on attributions and causal dimensionality styles of English learners in online learning context. Putting forward the reasons behind poor motivation and accompanying failure by subjective evaluation of the distance English learners might contribute to the achievement motivation literature in online learning contexts.

Method

Research Design

The study adopted descriptive survey design. Descriptive research is the research that tries to investigate the event as it is in order to determine the current situation. “Survey designs are procedures in quantitative research in which you administer a survey or questionnaire to a small group of people (called the sample) to identify trends in attitudes, opinions, behaviors, or characteristics of a large group of people (called the population)” (Creswell, 2002, p. 2). In this study, both qualitative and quantitative data were collected to gain more insights about the phenomenon. Qualitative data were gathered through a questionnaire consisting of open-ended questions. Quantitative data were gathered by using Causal Dimensions Scale. This study intends to seek answers to the following research questions:

- 1) What are the achievement perceptions of EFL learners?
- 2) What do distance EFL learners attribute their success and failure to?
- 3) What are the causal dimensionality patterns of distance EFL learners?

Participants

A total of n=88 adult online EFL learners attending different programs of an Open Education Faculty in a public university in Turkey voluntarily participated in this study. The participants’ ages ranged from 23 to 54 years. They were informed about the survey with an invitation on a social networking site, Facebook. English courses are offered as two compulsory courses for all programs in the Open Education Faculty, which provides context for this study. The

teaching strategy is based on individual learning. Online platforms and e-campus as a learning management system are used for the content delivery. In the e-campus system, there are e-learning materials and digital books. The course content also includes e-seminar sessions where teacher and the learners meet through videoconferencing. The participants answered the questionnaire and the scale online through the end of fall term in 2021-2022.

Data Collection Tools

The study adopted two different data collection tools. First the participants answered a questionnaire. Then, they completed The Causal Dimensions Scale based on their responses to questionnaire.

The Questionnaire

The researcher compiled a questionnaire that included one yes/no question and one open-ended question. The yes/no question asked if the participants considered themselves as successful or unsuccessful language learners. The open-ended question that followed the yes/no question asked participants to list the reasons behind their perceived success or failure. The participants were free to write as many reasons as they wished. This question intended to reveal the participants' causal attributions.

The Causal Dimensions Scale II

For the causal dimensionality patterns of the learners, The Causal Dimension Scale II (CDSII), a nine-point Likert type scale (McAuley et al., 1992) was utilized. CDSII was used in the study after obtaining the necessary permissions for copyright. CDSII is the second version (McAuley et al., 1992), and in this version the controllability dimension was modified. In the first version, it was thought that the internal consistency of the controllability dimension was weak and the fact that the controllability could be caused by the person himself/herself or by external factors resulted in additions and corrections to this dimension (McAuley et al., 1992). In this way, reliability values of the dimensions are given according to the results of four different studies on the new version (CDSII). Internal dimensions' consistencies were calculated, and Cronbach Alpha was reported to range between .60 and .92 in four studies (McAuley et al., 1992). The Turkish version of the scale was used and validated in another study by Semiz (2011). The Turkish version of the scale was checked by three English instructors for its clarity and face validity (Semiz, 2011).

CDSII, theoretically, includes the causal focus, causal stability and causal controllability dimensions of Weiner's attribution theory, and it also aims to measure the controllability dimension in two sub-dimensions as internal and external control. The scale has four sub-dimensions -causal focus (items 1-6-9), external control (items 5-8-12), stability (items 3-7-11), internal control (2-4-10). It is a 12-item scale. In the nine-point scale, two opposing statements were placed in each item and the participant was asked to choose a number according to the degree of closeness to which statement he / she felt close to. The highest score that can be obtained from the three items in each sub-dimension is 27 and the lowest score is three. The high score in these sub-dimensions shows that the cause is internal, stable and individually controllable. In the scale, the participant is asked to classify the answer given to the open-ended question according to these statements.

Data Collection Process

The questionnaire, CDSII, consent form for voluntary participation and information about the study were transferred into Google documents and were shared with the participants. The participants had a week to complete the questionnaire and CDSII.

Data Analysis

Perception of success was analyzed with frequency percentages. The questionnaire data were divided into two categories as *success group* (SG) and *failure group* (FG) based on the responses of the participants to the first question, namely perception of success. For the analysis of the open-ended question, which asked about the reasons behind their perceived success and failure, each cause was given a number and lists of causes for SG and FG were created. The lists were analyzed, and each cause was assigned a label independently by the researcher and a second rater separately. The raters then compared the lists of labels. When disagreement occurred, the raters discussed the labels together. Frequencies were calculated both for SG and FG.

For the causal dimensionality patterns of the learners, the scores given to the items related to the dimensions on CDSII were totaled and causal dimensions were created. The criteria used when evaluating the data are as follows: A high score from items of locus dimension (1-6-9.) indicates that the attribution is internal, and the low score indicates that it is external. The higher score in the external control dimension (5-8-12) indicates the controllability of the attribution (by other people), while the lower score indicates an uncontrollable attribution. In the personal control dimension (2-4-10), the higher score indicates that the attribution can be controlled by the individual, while the lower score signals that the ascription is uncontrollable by the person. Finally, the high score in the stability dimension (3-7-11) indicates that the reason for the attribution is permanent and the low score indicates that it is unsteady. Causal dimensionality of the participants was analyzed with descriptive statistics by calculating the mean scores of each dimension in for success and failure groups separately. The dimensionality style comparisons between success and failure groups were made with independent samples t-test statistics.

Findings

Perception of Success

The first research question asked if online EFL learners perceived themselves as successful language learners. Among 88 learners, those who answered as “yes” outnumbered those with “no” answers. The number of participants with success perception was 53, while it was 35 for those who believed they were unsuccessful. The findings can be seen in Table 1.

Tablo 1.

Perception of Success

<i>Perception of success</i>	<i>F</i>	<i>%</i>
successful	53	60.2*
unsuccessful	35	39.8
Total	88	100

* Higher percentages

Attributions

In success-oriented group, the participants stated 67 causes for their success and those causes were categorized under nine different attributions. The attributions included effort, ability, interest, motivation, background, teacher, program, determination, necessary for life. The findings can be seen in Table 2.

Table 2.

Attributions of Success Group

<i>Attributions</i>	<i>f</i>	<i>%</i>
Effort	21	31
Teacher	17	25
Interest	13	19
Motivation	5	8
Program	4	6
Background	2	3
Determination	2	3
Necessary for life	2	3
Ability	1	2
Total	67	100

The participants in failure-oriented group stated 35 causes for their failure. Their attributions were categorized under eight different attributions. The attributions included lack of effort, lack of background, lack of time, lack of ability, lack of motivation, lack of confidence, not necessary for future career, and program. Lack of effort, time and background were the most frequent attributions. The attributions, their frequencies and percentages can be seen in Table 3.

Table 3.

Attributions of Failure Group

<i>Attributions</i>	<i>f</i>	<i>%</i>
Lack of effort	8	23
Lack of time	8	23
Lack of background	7	20
Lack of ability	5	14
Lack of motivation	3	8
Program	2	6
Lack of confidence	1	3
Not necessary	1	3
Total	35	100

Dimensionality Styles

For the dimensionality styles, scores of SG and FG were compared in terms of locus, external control, personal control, and stability. Findings of SG revealed high scores for locus, low scores for external control, and high scores for both personal control and stability. Compared to SG, findings of FG indicated lower score for locus, higher score for external control, lower score for both personal control and stability. Findings can be seen in Table 4.

Table 4.

Causal Dimensionality Styles of Success and Failure Group

Groups		Locus	External Control	Personal Control	Stability
Success	Mean	7.01*	3.44	7.31*	6.55*
	N	159	159	159	159
	Std. Deviation	2.425	2.594	2.165	2.415
Failure	Mean	5.16	4.50*	4.86	4.25
	N	105	105	105	105
	Std. Deviation	2.839	2.791	2.910	2.776
Total	Mean	6.27	3.86	6.34	5.63
	N	264	264	264	264
	Std. Deviation	2.745	2.720	2.760	2.797

* Higher percentages

SG and FG was also compared in terms of causal dimensionality by using independent samples t-test. The findings can be seen in Table 5. Significant difference was found for all causal dimensions between the groups. That is, SG's scores for locus, personal control, and stability dimensions were significantly higher than those of FG. In terms of external control dimension, the scores of FG were significantly higher than those of SG.

Table 5.

Comparison of Causal Dimensionality Styles of SG and FG

Levene's Test for Equality of Variances	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower	Upper
Locus	6.53	.011	5.64	262	.000*	1.84	.32	1.20	2.48
ExternalContr	1.37	.243	-3.16	262	.002	-1.06	.33	-1.72	-.40
PersonalContr	19.92	.000	7.85	262	.000	2.45	.31	1.84	3.07
Stability	4.19	.041	7.13	262	.000	2.30	.32	1.66	2.93

* Higher values

Conclusion, Discussion and Implications

In educational contexts, it is challenging to make conclusions about achievement motivation as it has multifaceted nature. If the educational process is carried out in online learning contexts, this gets even harder. Especially in the context of online learning, the causal attributions that learners make following experiencing failure may help making predictions about the steps they will take in the next learning process and their future success. This can be possible only if we can understand the difference between failure caused by low ability or lack of effort (Graham & Taylor, 2022). At this point, attribution theory might provide guidance as it incorporates correlates of motivation constructs within the theoretical model (Anderman, 2020). Also, attribution theory "addresses the antecedents and consequences of both intrapersonal attributions (how one perceives the self) and interpersonal attributions (how one perceives other people)" (Graham, 2020, p.1).

In this study, more than 60% of the participants believed they were successful language learners. Among the top three attributions were effort, teacher and interest. Effort attribution in success condition is common in achievement motivation research (Weiner, 1985) and effort is likely to yield sustained effort in the future (Anderman, 2020). This finding indicates adaptive future behavior in the learning process. Second most frequent attribution was found to be the teacher. Even though the participants were distance language learners, they tended to ascribe their success to their teachers, a finding supported in similar studies in online language learning contexts (e.g. Ucar & Goksel, 2020; Kocdar et al., 2018). Among the reasons behind this finding may be e-seminar courses in the online distance learning process where the teacher and the learner have the opportunity to interact, and video conference classes with good instructional design. The fact that online learners can receive feedback and guidance from their teachers whenever they need, even from a distance, can be counted among the factors as well. Communication channels that can be established between the teacher and the learner through technology in online learning may have enabled students to be involved in the process without feeling emotional and communicational distance despite physical distance.

In failure condition, among the top three attributions were lack of effort, lack of time and lack of background. Lack of effort attribution after experiencing failure is a common attribution in the literature and in failure condition, changing low ability attribution, which refers to maladaptive belief, to lack of effort might yield more persistence and improved performance (Graham & Chen, 2020). Lack of effort attribution indicates that the reason for the failure is not an innate talent, it can be changed, and next time failure can be avoided by effort and practice. In this context, the finding of this study shows that online learners who find themselves unsuccessful have adaptive beliefs about their failure. That is, they tend to believe that they can avoid failure through self-effort and practice. Second most frequent attribution was found to be lack of time. The reason behind this might be that all participants were adult distance language learners, and they might have other responsibilities such as work and family, and thus, they cannot focus on their academic studies as much as they wish. Therefore, they might have ascribed their failure to lack of time. As attribution studies mostly conducted in face-to-face learning contexts, this finding might contribute to the relevant literature in online learning environments.

In terms of causal dimensionality, SG tended to have significantly healthier dimensionality styles with high score for locus, low score for external control, and high score for both personal

control and stability. That means in online learning context learners who perceive themselves successful believe they have the control over their learning outcomes, and they expect their success condition will not change in the future. Students with positive attributions like in this study tend to be more intrinsically motivated with the control of their learning process, clear study goals and awareness of how to achieve them (Dweck, 2000), which in return results in achievement and persistence in language learning (Peacock, 2010; Hsieh & Schallert, 2008). Internal and controllable ascriptions in success condition can help language learners to control the causes of their achievement and become high achieving language learners in the future. Nonetheless, other factors and domains apart from attributions on success and failure should be considered and addressed while examining achievement motivation in language learning (Kasap & Ünsal, 2021). FG dimensionality styles, on the other hand, showed maladaptive pattern with lower score for locus, higher score for external control, lower score for both personal control and stability and this shows similarity to the findings of some attribution research (Burden & Al-Baharna, 2001; Chen, 2011) That means, the participants who believe they are unsuccessful in foreign language learning tend to put the blame on external reasons other than themselves. They think they do not have control over their learning outcomes. This finding indicates unhealthy dimensionality style, which might yield destructive, maladaptive behaviors (Stipek, 1988; Weiner, 1985). This dimensionality style is generally associated with hopelessness, low motivation, self-confidence, and self-efficacy, which in return lead to feeling of shame, guilt and procrastination (Hsieh & Kang, 2010; Weiner, 2000; Williams et al., 2004). Therefore, pedagogical effects of unhealthy attributional styles should be considered seriously. If language teachers become aware of their students' maladaptive attributional styles, they might ensure their students that they actually have control over their outcomes (Zhang et al., 2021).

It is always possible to change maladaptive attributional styles of learners as long as educators identify them. That is why many studies focus on attribution retraining programs. For example, in their study Hamm et al. (2020) compared attribution retraining with no-attribution retraining condition with students who were considered to be academically at-risk. Students who received attribution retraining were 61% more likely to graduate from programs compared to those without attribution retraining. Another study by Dryden et al. (2021) revealed that mindfulness regarding unhealthy attributional styles and retraining them might improve the motivational mindset, academic performance, and persistence for the students who are failure oriented. Without being aware of these unhealthy beliefs of learners, educators cannot take an action. That is why this finding stands out to be of paramount importance.

Implications and Suggestions for Further Research

This study sheds light on attributional research in an online language learning context. In online learning contexts making conclusions about motivation might be more feasible by applying attribution theory. Findings can help both teachers and learners in terms of becoming aware of the significance of attributions in shaping one's future behavior and achievement because learner perceptions may affect motivation, self-efficacy and striving for success. As findings indicate, success-oriented online learners tend to have healthier attributional styles compared to failure-oriented learners. This might be a good starting point to search the aspects of online learning context that enhance adaptive attributional styles.

In this connection, conducting more in-depth qualitative research into causal dimensionality in online learning environments might be beneficial. More qualitative research with online learners should be done so that factors in the online learning context that lead to healthy attributions can be revealed. Also, attribution retraining studies can be initiated for failure-oriented learners to attribute their success and failure to internal and controllable reasons by emphasizing effort rather than external factors. Once educators become aware of motivational problems of learners in online learning contexts, explicit attribution retraining can be provided in order to change negative perceptions into positive ones. More importantly, attribution research might reveal weaknesses and strengths of online instructional design through the learner perception. Attribution studies are of paramount importance as they can reveal online learners' perceptions of their performance, which in return creates a chance for educators to take necessary measures to transform their learners' unhealthy attributions by giving constructive feedback.

Research ethics committee approval information: This study was conducted with the permission of Anadolu University Ethical Board with the decision dated 24/12/2021 and numbered E-54380210-050.99-238252.

Statement of Conflict of Interest: The author declares that there is no conflict of interest and fund related to this study.

References

- Anderman, E. M. (2020). Achievement motivation theory: Balancing precision and utility. *Contemporary Educational Psychology*, 61, 101864. <https://doi.org/10.1016/j.cedpsych.2020.101864>
- Brophy, J. (2010). *Motivating students to learn* (3rd ed.). New York, NY: Routledge.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative*. Upper Saddle River, NJ: Prentice Hall.
- Dresel, M., Schober, B., & Ziegler, A. (2005). Nothing more than dimensions? Evidence for a surplus meaning of specific attributions. *The Journal of Educational Research*, 99(1), 31-45. <https://doi.org/10.3200/JOER.99.1.31-45>
- Dryden, R. P., Perry, R. P., Hamm, J. M., Chipperfield, J. G., Clifton, R. A., Parker, P. C., & Krylova, M. V. (2021). An attribution-based motivation treatment to assist first-generation college students reframe academic setbacks. *Contemporary Educational Psychology*, 64, 101938.
- Dumais, S. A., Rizzuto, T. E., Cleary, J. & Dowden, L. (2013). Stressors and supports for adult online learners: comparing first-and continuing-generation college students. *American Journal of Distance Education*, 27(2), 100-110. <https://doi.org/10.1080/08923647.2013.783265>
- Dweck, C. (2000). *Self-theories: Their role in Motivation, Personality and Development*. Philadelphia, PA: Taylor & Francis.
- Feshbach, S., Weiner, B. (1991). *Personality* (3rd Ed.). A.B.D.: D. C. Heath and Company.

- Garrison, D.R. (2003). Self-directed learning and distance education. In Moore MG, Anderson WG (Eds.). *Handbook of distance education* (pp. 161–168). Mahwah, NJ
- Graham, S. (2020). An attributional theory of motivation. *Contemporary Educational Psychology*, 61, 101861. <https://doi.org/10.1016/j.cedpsych.2020.101861>
- Graham, S., & Chen, X. (2020). Attribution Theories. In *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.892>
- Graham, S., & Taylor, A. Z. (2022). The power of asking why?: Attribution retraining programs for the classroom teacher. *Theory Into Practice*, 61(1), 5-22.
- Hamm, J. M., Perry, R. P., Chipperfield, J. G., Hladkyj, S., Parker, P. C., & Weiner, B. (2020). Reframing achievement setbacks: A motivation intervention to improve 8- Year graduation rates for students in science, technology, engineering, and mathematics (STEM) Fields. *Psychological Science*, 31(6), 623-633. doi:10.1177/0956797620904451.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, (March 27, 2020). <https://er.educause.edu/articles/2020/3/the-differencebetween-emergency-remoteteaching-and-online-learning>
- Hsieh, P. P. H., & Kang, H. S. (2010). Attribution and self-efficacy and their interrelationship in the Korean EFL context. *Language Learning*, 60(3), 606-627. <https://doi.org/10.1111/j.1467-9922.2010.00570.x>
- Hsieh, P. H. P., & Schallert, D. L. (2008). Implications from self-efficacy and attribution theories for an understanding of undergraduates' motivation in a foreign language course. *Contemporary Educational Psychology*, 33(4), 513-532. <https://doi.org/10.1016/j.cedpsych.2008.01.003>
- Holmberg, B. (1995). The evolution of the character and practice of distance education. *Open Learning: The Journal of Open, Distance and e-Learning*, 10(2), 47-53.
- Johnson, E., Morwane, R., Dada, S., Pretorius, G., & Lotriet, M. (2018). Adult Learners' Perspectives on Their Engagement in a Hybrid Learning Postgraduate Programme. *The journal of continuing higher education*, 66(2), 88–105. <https://doi.org/10.1080/07377363.2018.1469071>
- Joo, K. P. (2014). A cultural-historical activity theory investigation of contradictions in open and distance higher education among alienated adult learners in Korea National Open University. *The International Review of Research in Open and Distance Learning*, 15(1). <https://doi.org/10.19173/irrodl.v15i1.1605>
- Kasap & Ünsal (2021). Attribution theory and language learning. *Research in Language and Education: An International Journal [RILE]*, 1(2), 111-118.
- Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual review of psychology*, 31(1), 457-501.

- Kocdar, S., Karadeniz, A., & Goksel, N. (2018). Using Facebook for Leveraging Sense of Community in Self-Paced Open and Distance Learning Courses. *International Journal of Emerging Technologies in Learning*, 13(5), 100-116.
- Lei, L., & Qin, X. (2009). An empirical study of success and failure attributions of EFL learners at the tertiary level in China. *Asian EFL Journal*, 11(3), 29-51.
- Lim, D. H. (2004). Cross cultural differences in online learning motivation. *Educational Media International*, 41(2), 163–173. <https://doi.org/10.1080/09523980410001685784>
- Lindeman, E. (2015). *The meaning of adult education*. Andesite Press.
- Linnenbrink, E. A., & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review*, 31(3), 313-327. <https://doi.org/10.1080/02796015.2002.12086158>
- McAuley, E., Duncan T. E., Russell, D. W. (1992). Measuring Causal Attributions: The Revised Causal Dimension Scale (CDSII). *Personality and Social Psychology Bulletin*, 18 (5), 566-573. <https://doi.org/10.1177%2F0146167292185006>
- McClelland, D. C. (1985). *Human motivation*. Glenview, IL: Scott, Foresman.
- Meece, J. L., Anderman, E. M., & Anderman, L. H. (2006). Classroom goal structure, student motivation, and academic achievement. *Annual Review of Psychology*, 57, 487-503. <https://doi.org/10.1146/annurev.psych.56.091103.070258>
- Moore, M. G. (1991). Editorial: Distance education theory. *The American Journal of Distance Education*, 5(3), 1-6.
- Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29-48. <https://doi.org/10.1080/01587910500081269>
- Paulsen, M. F. (1993). The hexagon of cooperative freedom: A distance education theory attuned to computer conferencing. *DEOSNEWS*, 3(2). https://www.nooa.no/wp-content/uploads/2017/11/deosnews3_2.pdf
- Peacock, M. (2010). Attribution and learning English as a foreign language. *ELT Journal*, 64, 184-193. <https://doi.org/10.1093/elt/ccp031>
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications*. Prentice Hall.
- Pishghadam, R., & Zabihi, R. (2011). Foreign language attributions and achievement in foreign language classes. *International Journal of Linguistics*, 3(1), 1-11. <https://profdoc.um.ac.ir/articles/a/1021579.pdf>
- Prasad, V. S. (2018). *Higher education and open distance learning trajectory in India: Reflections of an insider (version 1)*. Hyderabad, India: Dr. B. R. Ambedkar Open University OER Repository. www.braouvidyagani.in.
- Rotter, J. B. (1966). Generalized expectancies for internal and external control of reinforcement. *Psychological Monographs: General and Applied*, 80, 1–28.

- Seidlhofer, B. (2005). English as a lingua franca. *ELT Journal*, 59(4), 339-341. <https://doi.org/10.1093/elt/cci064>
- Semiz, Ö. (2011). The effects of a training program on attributional beliefs, self-efficacy, language learning beliefs, achievement and student effort: A study on motivationally at-risk students. PhD Thesis Submitted to the Graduate School of Educational Sciences Atatürk University, Erzurum. <https://acikbilim.yok.gov.tr/handle/20.500.12812/57144>
- Simpson, O. (2013). Student retention in distance education: are we failing our students?. *Open Learning: The Journal of Open, Distance and e-Learning*, 28(2), 105-119.
- Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education*, 33(4), 289-306.
- Selwyn, N. (2011). 'Finding an appropriate fit for me': examining the (in) flexibilities of international distance learning. *International Journal of Lifelong Education*, 30(3), 367-383. <https://doi.org/10.1080/02601370.2011.570873>
- Stipek, D.J. (1998). *Motivation to Learn: From Theory to Practice*. Boston: Allyn & Bacon.
- Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006). Teaching courses online: A review of the research. *Review of Educational Research*, 76(1), 93-135. <https://doi.org/10.3102/00346543076001093>
- Ucar, H., & Goksel, N. (2020). Enhancing Online EFL Learners' Motivation and Engagement through Supplementary Activities on Facebook. *Asian Journal of Distance Education*, 15(1), 154-168.
- Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of Educational Research*, 42(2), 203-215.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological review*, 92(4), 548-573. <http://dx.doi.org/10.1037/0033-295X.92.4.548>
- Weiner, B. (2000). Intrapersonal and Interpersonal Theories of Motivation from an Attributional Perspective. *Educational Psychology Review*, 12 (1), 1-13. <https://www.jstor.org/stable/23363504>
- Willging, P. A. & Johnson, S. D. (2009). Factors that influence students' decision to dropout of online courses. *Journal of Asynchronous Learning Networks*, 13(3), 115-127. <https://files.eric.ed.gov/fulltext/EJ862360.pdf>
- Williams M R, Burden S., Al-Baharna, H. (2001) Making sense of success and failure: The role of the individual in language learning. In Dörnyei Z, Schmidt R (eds), *Motivation and Second Language Acquisition*, Honolulu: University of Hawai'i at Manoa, Second Language Teaching and Curriculum Center, pp. 169- 82.
- Williams, M., Burden, R., Poulet, G., & Maun, I. (2004). Learners' perceptions of their successes and failures in foreign language learning. *Language Learning Journal*, 30(1), 19-29. <https://doi.org/10.1080/09571730485200191>

- Zhang, X., Lou, N. M., Noels, K., Daniels, L. (2021). Attributions and mindsets. In T. Gregersen & S. Mercer (Eds.), *The Routledge Handbook of Psychology of Language Learning*. Routledge.
- Zhang, Z. & Krug, D. (2012). Virtual Educational Spaces: Adult Learners' Cultural Conditions and Practices in an Online Learning Environment. *International Journal of Instructional Technology and Distance Learning*, 9(7), 3–12. http://www.itdl.org/Journal/Jul_12/Jul_12.pdf

Geniş Özet

Giriş

Öğrenmeyi etkileyen kritik faktörlerden biri olan motivasyon (Lim, 2004), öğrencilerin derse devam etmelerinde veya dersten vazgeçmelerinde belirleyici bir faktör olarak görülmektedir (Muilenburg ve Berge, 2005). Özellikle çevrimiçi öğrenme bağlamlarında başarı motivasyonunu etkileyen faktörleri, bağlamdaki çok sayıda değişken nedeniyle net bir şekilde ortaya koymak zordur. Zayıf motivasyon birçok faktörden kaynaklanabilir. Yükleme kuramı (Weiner, 1972) bu konuyla yani başarı ve başarısızlığın nedenleriyle ilgilenen kuramdır. Weiner (1972) yükleme kuramını, sonuçların nedenlerinin bireyler tarafından yorumlanması olarak tanımlar. Bu yorumlar, gelecekteki sonuçları etkileyen kritik faktörler olarak kabul edilir. Temel olarak teori, bireyin belirli bir olayın neden meydana geldiğine ve bu yorumların sonraki eylemi nasıl etkilediğine dair yargısına odaklanır (Weiner, 1972, s. 202).

Yüklemelerin öğrenenlerin başarı motivasyonunu, dersteki kalıcılığını ve ileriye dönük başarı beklentilerini doğrudan etkileyen bilişsel ve duyuşsal sonuçlara sahip olduğunu ortaya koyulmuştur (Meece vd., 2006; Pintrich ve Schunk, 2002; Weiner, 1985, 2000; Williams vd., 2001). Bu çalışma, hipotez üretmeden doğrudan katılımcılara başarı algısını sormayı amaçlamaktadır. Katılımcılardan, başarı algılarına dayalı olarak, kendilerine sunulan önceden belirlenmiş nedenler listesinden seçim yapmak yerine, başarı veya başarısızlığın nedenlerini kendilerinin bildirmeleri istenmiştir. Atıfların bağlamı ve bireye özgü doğası göz önüne alındığında, katılımcıların çıktılarının nedenlerini kendilerinin listelemelerini sağlamak, çalışmanın bulgularını daha güçlü hale getirebilir. Daha da önemlisi, başarı yüklemeleri üzerine yapılan çalışmalar göz önüne alındığında, çevrimiçi öğrenme bağlamında İngilizce öğrenenlerin yüklemeleri ve nedensel boyutluluk stilleri hakkında çok fazla araştırma olmadığı görülmektedir. Uzaktan İngilizce öğrenenlerin öznel değerlendirmesiyle zayıf motivasyonun ve buna eşlik eden başarısızlığın arkasındaki nedenleri ortaya koymak, çevrimiçi öğrenme bağlamlarında başarı motivasyonu literatürüne katkıda bulunabilir.

Yöntem

Çalışma, betimsel tarama tasarımını benimsemiştir. Betimsel araştırma, mevcut durumu belirlemek için olayı olduğu gibi incelemeye çalışan araştırmadır (Creswell, 2002, s. 2). Bu çalışmada, olgu hakkında daha fazla içgörü elde etmek için hem nitel hem de nicel veriler toplanmıştır. Nitel veriler açık uçlu sorulardan oluşan bir anket aracılığıyla toplanmıştır. Nicel

veriler Nedensel Boyutlar Ölçeği II kullanılarak toplanmıştır. Bu çalışma aşağıdaki araştırma sorularına yanıt aramayı amaçlamaktadır:

- 1) Uzaktan İngilizce öğrenenlerin başarı algıları nelerdir?
- 2) Başarı ve başarısızlık durumlarında uzaktan İngilizce öğrenenlerin yüklemeleri nelerdir?
- 3) Uzaktan İngilizce öğrenenlerin başarı ve başarısızlık durumlarındaki nedensel boyutluluk stilleri nelerdir?

Türkiye'de bir devlet üniversitesindeki bir Açıköğretim Fakültesinin farklı programlarına devam eden toplam n=88 yetişkin çevrimiçi İngilizce öğrencisi gönüllü olarak bu çalışmaya katılmıştır. Çalışma iki farklı veri toplama aracını benimsemiştir. Araştırmacı, bir evet/hayır sorusu ve bir açık uçlu soru içeren bir anket derlemiştir. Evet/hayır sorusu, katılımcıların kendilerini başarılı veya başarısız dil öğrencileri olarak görüp görmediklerini sormuştur. Evet/hayır sorusunun ardından gelen açık uçlu soru, katılımcılardan algılanan başarı veya başarısızlıklarının arkasındaki nedenleri listelemelerini istemiştir. Diğer veri toplama aracı olarak öğrencilerin nedensel boyutluluk örüntüleri için dokuzlu Likert tipi bir ölçek olan Nedensel Boyutlar Ölçeği II (NBÖII) (McAuley ve diğerleri, 1992) kullanılmıştır. Bu ölçek teorik olarak Weiner'in atıf teorisinin nedensel odak, nedensel kararlılık ve nedensel kontrol edilebilirlik boyutlarını içerir ve ayrıca kontrol edilebilirlik boyutunu iç ve dış kontrol olmak üzere iki alt boyutta ölçmeyi amaçlar. Başarı algısı frekans yüzdeleri ile analiz edilmiştir. Anket verileri, katılımcıların ilk soruya yani başarı algısına verdikleri yanıtlara göre başarı grubu (BG) ve başarısızlık grubu (BZG) olarak iki kategoriye ayrılmış, algılanan başarı ve başarısızlıklarının ardındaki nedenleri soran açık uçlu sorunun analizi için BG ve BZG için neden listeleri oluşturulmuştur. Listeler analiz edilmiş ve her bir nedene araştırmacı tarafından bağımsız olarak bir etiket ve ayrı ayrı ikinci bir puanlayıcı atanmıştır. Değerlendiriciler daha sonra etiket listelerini karşılaştırmıştır ve nihai yüklemelere ulaşmışlardır. Nedensel boyutluluk örüntüleri için CDSII'deki boyutlara ilişkin maddelere verilen puanlar toplanarak nedensel boyutlar oluşturulmuştur.

Bulgular

İlk araştırma sorusu için 88 öğrenciden başarı odaklı öğrencilerin sayısı başarısızlık odaklı öğrencilerden fazla bulunmuştur. Başarı odaklı grupta, katılımcıların ifadeleri dokuz farklı yükleme altında kategorize edilmiştir. Yüklemeler, çaba, yetenek, ilgi, motivasyon, altyapı, öğretmen, program, kararlılık ve yaşam için gerekli şeklinde sıralanmıştır. Başarısızlığa yönelik gruptaki katılımcıların ifadeleri sekiz farklı yükleme altında kategorize edilmiştir. Atıflar, çaba eksikliği, altyapı eksikliği, zaman eksikliği, yetenek eksikliği, motivasyon eksikliği, özgüven eksikliği, gelecekteki kariyer için gerekli değil ve program şeklinde sıralanmıştır. Boyutluluk stilleri için, BG ve BZG puanları odak, dış kontrol, kişisel kontrol ve kararlılık açısından karşılaştırılmış, BG'nin bulguları, odak için yüksek puanlar, dış kontrol için düşük puanlar ve hem kişisel kontrol hem de kararlılık için yüksek puanlar ortaya çıkarmıştır. BZG bulguları odak için daha düşük puan, dış kontrol için daha yüksek puan, hem kişisel kontrol hem de stabilite için daha düşük puan göstermiştir.

Sonuç ve Tartışma

Bu çalışmada, katılımcıların %60'ından fazlası başarılı dil öğrencileri olduklarına inanmıştır. En sık tekrarlanan üç yükleme arasında çaba, öğretmen ve ilgi yer almıştır. İkinci en

sık yükleme ise öğretmen olarak bulunmuştur. Katılımcılar uzaktan dil öğreniyor olsalar da başarılarını öğretmenlerine atfetme eğilimi göstermiştir. Bu bulgu çevrimiçi dil öğrenme bağlamlarında yapılan benzer çalışmalarda da desteklenmiştir (örn. Uçar ve Göksel, 2020; Koçdar ve diğerleri, 2018). Bu bulgunun arkasındaki nedenler arasında, çevrimiçi uzaktan eğitim sürecinde öğretmen ve öğrencinin etkileşime girme fırsatı bulduğu e-seminer kursları ve iyi bir öğretim tasarımına sahip video konferans dersleri sayılabilir. Başarısızlık durumunda, ilk üç yükleme arasında çaba eksikliği, zaman eksikliği ve alt yapı eksikliği yer almıştır. Başarısızlık yaşadıktan sonra çaba eksikliği yüklemesi literatürde yaygın bir yüklemedir ve başarısızlık durumunda, uyumsuz inancı ifade eden düşük yetenek yüklemesinin çaba eksikliğine dönüştürülmesi daha fazla ısrar ve performans artışı sağlayabilir (Graham ve Chen, 2020). Bu çalışmanın bulgusu, kendilerini başarısız bulan çevrimiçi öğrenenlerin başarısızlıkları hakkında sağlıklı inançlara sahip olduklarını göstermektedir. Nedensel boyutluluk açısından, BG önemli ölçüde daha sağlıklı boyutsallık stillerine sahip olma eğiliminde olmuştur. Bu, çevrimiçi öğrenme bağlamında, kendilerini başarılı algılayan öğrencilerin, öğrenme çıktıları üzerinde kontrole sahip olduklarına inandıkları ve başarı durumlarının gelecekte değişmeyeceğini bekledikleri anlamına gelebilir. Öte yandan BZG boyutluluk stilleri, sağlıklı boyutsallık stillerine işaret etmiştir ve bu bazı ilişkilendirme araştırmalarının bulgularına benzerlik göstermiştir (Burden ve Al-Baharna, 2001; Chen, 2011). Yani yabancı dil öğrenmede başarısız olduğuna inanan katılımcılar suçu kendilerinden başka dışsal nedenlere yükleme eğilimindedirler.

Öneriler

Bu çalışma, çevrimiçi bir dil öğrenme bağlamındaki nitelendirme araştırmalarına ışık tutmaktadır. Çevrimiçi öğrenme bağlamlarında, yükleme teorisini uygulayarak motivasyon hakkında sonuçlar çıkarmak daha uygun olabilir. Bulgular, hem öğretmenlere hem de öğrencilere, kişinin gelecekteki davranışını ve başarısını şekillendirmede atıfların önemini farkına varmalarında yardımcı olabilir, çünkü öğrenen algıları motivasyonu, öz yeterliliği ve başarı için çabalamaı etkileyebilir. Bulguların gösterdiği gibi, başarı odaklı çevrimiçi öğrenenler, başarısızlık odaklı öğrenenlere kıyasla daha sağlıklı yükleme stillerine sahip olma eğilimindedir. Bu, çevrimiçi öğrenme bağlamının uyarlanabilir yükleme stillerini geliştiren yönlerini araştırmak için iyi bir başlangıç noktası olabilir. Bu bağlamda, çevrimiçi öğrenme ortamlarında nedensel boyutluluğa ilişkin daha derinlemesine nitel araştırmalar yapmak faydalı olabilir.