

**Motivational Study Conditions Scale: Turkish Adaptation,
Validity and Reliability Study * ** *****

**Motivasyonel Çalışma Koşulları Ölçeği: Türkçeye
Uyarlama, Geçerlik ve Güvenirlik Çalışması**

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ABSTRACT

Problems concerning student motivation have been setting important barriers to education. However, no measurement tool has been found that can determine students' evaluations of motivational study conditions in the Turkish literature. The present study aimed to perform the adaptation of the Motivational Study Conditions Scale developed in German by Kauper et al., (2010) into Turkish. University students (n=692) participated in the study. Exploratory factor analysis was performed over the data collected in the first step (n=352) and confirmatory factor analysis over the data collected afterwards (n=340). The values obtained from factor analyses ranged within acceptable limits. Since the alpha internal consistency coefficients were between .69 and .88, the reliability of the scale was found appropriate. Coefficients of composite reliability were also seen to be consistent with the alpha reliability values. As for construct validity, discriminant validity in the context of divergent validity and convergent validity were examined, and acceptable values were obtained. It was concluded that the Turkish form of the scale was a valid and reliable measurement tool.

Keywords: *Psychological needs, Scale adaptation, Self Determination Theory,*

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ÖZ

Öğrenci motivasyonundaki sorunları eğitimdeki önemli engellerdendir. Ancak Türkçe alanyazında motivasyonel çalışma koşullarına ilişkin öğrenci değerlendirmelerini belirleyebilecek bir ölçme aracına rastlanamamıştır. Bu çalışmanın amacı Kauper vd. (2010) tarafından Almanca olarak geliştirilen Motivasyonel Çalışma Koşulları Ölçeği'nin Türkçeye uyarlanmasıdır. Araştırmaya 692 üniversite öğrencisi katılmış, ilk etapta toplanan 352 veri üzerinden açımlayıcı faktör analizi, sonrasında toplanan 340 veri üzerinden ise doğrulayıcı faktör analizi yapılmıştır. Faktör analizleri sonucunda elde edilen değerlerin kabul edilebilir sınırlar içerisinde olduğu görülmektedir. Bu faktörlerin alfa iç tutarlık katsayısı değerleri .69 ila .88 arasında değiştiğinden ölçeğin güvenilirliği uygun bulunmuştur. Yapısal güvenilirlik katsayılarının da alfa güvenilirlik değerleriyle tutarlı olduğu görülmektedir. Yapı geçerliği olarak da yakınsama geçerliği ve iraksama geçerliği bağlamında ayırt edici geçerliği incelenmiş kabul edilebilir değerler elde edilmiştir. Sonuç olarak Motivasyonel Çalışma Koşulları Ölçeği'nin Türkçe formunun psikometrik özelliklerinin üniversite öğrencileri örnekleminde uygun olduğu sonucuna varılmıştır.

Anahtar Sözcükler: Psikolojik ihtiyaçlar, Ölçek uyarlama, Öz Belirleme Kuramı

INTRODUCTION

Student motivation has emerged as one of the most challenging issues in education in recent years. Together with the effects of the global pandemic, it is seen that students' motivation levels have decreased and intrinsic motivation has been adversely affected by this condition (Aytaç, 2021; Tekin, 2020). These negative conditions in students' motivation reduce teaching efficiency, preventing the curriculum from reaching its objectives (ERG, 2020, 2021). Therefore, research on the factors affecting student motivation is of considerable importance.

There are many theories explaining student motivation. One of the most comprehensive theories to define motivation is the Self-Determination Theory (SDT) (Deci & Ryan, 1985). SDT suggests that individuals tend to get into interaction with their surroundings, research, explore and collect information with no extrinsic reward. According to the theory, individuals tend to behave positively but may display negative behaviours like selfishness, cruelty, and dishonesty when their psychological needs are

not met (Sheldon & Ryan, 2011). Individuals' sources of motivation emerge based on self-determination or control. When behaviours come out naturally on a voluntary basis, they are related to self-determination; while they are based on control when they are displayed as a result of striving (Deci & Ryan, 2017; Kandemirci, 2018). Individuals take pleasure in actions based on self-determination and are more successful than those relying on control.

SDT states that individuals have three types of motivation. These are intrinsic motivation, extrinsic motivation and amotivation. Intrinsically motivated individuals do the activity for its inherent satisfaction, and being engaged in the action itself is the reward. Extrinsically motivated individuals act because they need to or they have to do so (Deci & Ryan, 1985). They are motivated to avoid punishment, meet external expectations or get a benefit like a reward as a result of their action. Extrinsic motivation involves four separate regulations. These include external, introjected, identified, and integrated regulations (Deci & Ryan, 2017). External regulation represents the least self-determined level, and extrinsic rewards, threats, and forces motivate the individual. In introjected regulation, external words, orders, bans, and advice are introjected without sufficient contemplation. In identified regulation, individuals tend to perform a certain task as they see it important or functional. Integrated regulation is the most autonomous and closest form of external regulation to intrinsic motivation (Deci & Ryan, 2017, 2020). Amotivation, on the other hand, describes the lack of motivation. In this case, the individual does not have sufficient reason to move to act (Deci & Ryan, 2017). Intrinsic motivation is more autonomous than extrinsic motivation by nature. In addition, intrinsically motivated individuals are expected to have better psychological well-being than extrinsically motivated individuals. Moreover, since intrinsically motivated individuals employ more effective learning strategies, they have higher academic performance (Clark, Middleton, Nguyen, & Zwick, 2014).

One of the most critical factors affecting individuals' motivation types is their psychological needs. These needs are autonomy, competence, and relatedness.

Autonomy can be defined as one's playing an active role in his/her own life, having a strong will, and living in harmony with his/her interests and values. When controlled by extrinsic forces and the individual's willingness is lacking, the need for autonomy cannot be satisfied (Deci & Ryan, 2017; Kandemirci, 2018). Competence is an individual's need to see himself or herself act with effectance and mastery when interacting with others. The need for competence can easily be hurt when the task is too challenging, negative feedback is received or the person rather than the performed task is criticized (Deci & Ryan, 2017). Relatedness, on the other hand, refers to the need to be socially related. Individuals display helpful behaviour or try to make contributions to be an important part of a group. Individuals' feeling of being understood and cared by others satisfies the need for relatedness (Deci & Ryan, 2017).

Another important theory concerning motivation is the Flow Theory. Flow experience occurs when an individual is fully engaged in an activity and enjoys the process. This can be defined as motivation gathered at a single point. During an activity of flow state, the individual is not influenced by anything, including his or her own feelings and thoughts, and concentrates on the task completely (Nakamura & Csikszentmihalyi, 2002). In this state, the individual feels a natural joy and is overwhelmed with an intense level of concentration. In order for flow to occur, the individual has to be actively absorbed in the task. To do so, activities must have clear goals, and the direction and structure of the task must be definite (Gold & Ciorciari, 2020). For flow experience, getting immediate feedback during the activity is important and the individual needs to feel he or she possesses the required potential to be successful. Giving immediate feedback during the activity is also important in terms of maintaining the flow under changing conditions. Feedback would also enable the individual to understand how successful he or she is during the activity (Keller & Landhäußer, 2012). In addition, the individual's perception of the balance between the challenges of the task and his/her own skills is also significant for the flow. The individual's belief in his/her ability to complete the task is essential for the occurrence and maintenance of the flow (Nakamura & Csikszentmihalyi, 2002). Barriers in front of maintaining flow include

apathy, boredom, and anxiety. When challenges or the individual's skills are not sufficient, apathy comes out. When the individual's skills are at a much higher level than the challenges, boredom is experienced. Anxiety occurs when challenges are higher than the individual's abilities and skills. When the individual's skills and challenges coincide, flow occurs. Increasing the challenge in the event that the task is too easy; and gaining new skills by the individual if the task is too challenging would help maintaining the flow (Engeser, 2012; Keller & Landhäußer, 2012; Nakamura & Csikszentmihalyi, 2002).

In the light of these theories, the quality of teaching becomes more important in terms of student motivation and teachers are expected to employ practices that would enhance student learning (Haakma, Janssen, & Minnaert, 2017). Practices intended for boosting student motivation are termed as needs supportive teaching (Haakma vd., 2017; Hornstra, Stroet, & Weijers, 2021; Otundo & Garn, 2019). Teachers conducting needs supportive teaching are seen to listen to their students more, be less directive, answer students' questions more and try to solve their problems, consider student demands more, support students' attempts more, spare time for independent studies, support students' efforts, give feedback on the product rather than the individual and communicate with students with empathy (Johnmarshall Reeve, 2006; Johnmarshall Reeve, Bolt, & Cai, 1999). On the other hand, giving the solutions of problems without allowing students to work independently, providing detailed and ordering instructions, using imperative statements, asking directive questions when speaking to students are considered negative for student motivation (Johnmarshall Reeve & Jang, 2006). In addition to boosting student motivation, needs supportive teaching seems to enhance students' school commitment, academic achievement as well as their physiological well-being (Stroet, Opdenakker, & Minnaert, 2013; Theis, Sauerwein, & Fischer, 2020). Therefore, teachers are expected to organize learning and teaching activities in a needs supportive approach. In other words, teachers are supposed to create motivational study conditions.

Motivational study conditions define considering the factors supporting student motivation when organizing the learning environment and implementing learning activities (Kauper vd., 2010; Johnmarshall Reeve & Jang, 2006; Stroet vd., 2013). In order to boost motivation, it is important that study conditions are shaped in a way to satisfy students' psychological needs and maintain the flow. In this regard, study conditions that provide students with autonomy, support their need for competence and relatedness, present an appropriate level of challenge and sufficient feedback would affect student motivation positively, enhance intrinsic motivation and contribute to students' psychological well-being (Deci & Ryan, 2017). In order for study conditions to enhance student motivation, it is highly important that the content is appropriate for students, the quality of teaching is good, the interest of the instructor in the subject is sufficient, and course tasks are at an appropriate level of challenge (Hornstra vd., 2021; Kauper vd., 2010; Keller & Landhäußer, 2012; Stroet vd., 2013).

Motivational study conditions are positively correlated with students' motivation for learning and school commitment levels (Stroet vd., 2013). Students who have positive motivational study conditions and are in a learning environment where their psychological needs are satisfied have lower levels of stress hormone than those studying in a controlling environment while their motivation and school commitment levels increase (Johnmarshall Reeve & Tseng, 2011). Students' perceptions of motivational study conditions affect not only their motivation levels but also the types of motivation they have. Perceptions concerning the satisfaction of psychological needs have a positive effect on students' interest and intrinsic motivation, whereas the perceived controlling teacher behaviour increases extrinsic motivation (Tsai, Kunter, Lüdtke, Trautwein, & Ryan, 2008).

However, many schools fail to support their students' intrinsic motivation and work to enhance extrinsic motivation (Deci & Ryan, 2017).. Students' intrinsic motivation decreases during school years, which leads many educators to use grades, tests and other extrinsic pressure factors to enable students to learn (Deci & Ryan, 2017; Lepper, Corpus, & Iyengar, 2005). Students who study in a controlling environment lose their

sense of self-confidence and value together with the intrinsic motivation, one of the main values concerning learning (Deci & Ryan, 2017). In schools where student motivation falls, it is seen that students' needs for autonomy, competence and relatedness are not satisfied (Gnambs & Hanfstingl, 2016). Meeting psychological needs and supportive study conditions for motivation is essential to maintain intrinsic motivation throughout school life. For these reasons, rather than the traditional pattern of presenting-asking questions- evaluating in in-class practices, teachers should create a learning environment where all students can develop their own opinions, reflect their learning and draw reasoned conclusions on other's ideas (Troyer, 2019). Providing students only with little choice and autonomy during the day increases their intrinsic motivation, which also influences other school activities (Skinner & Chi, 2012).

Pre-determined top-down teaching practices that have weak connections with students' daily life are not very effective in supporting intrinsic motivation. It is known that curriculum which is not adapted in accordance with students' needs decrease the efficiency of instruction (Nalbantoğlu Yazıcılar, 2021; Troyer, 2019). Designing the curriculum based on student needs, preparing the learning tasks appropriately for student readiness, and conducting instruction in line with the principle of student-appropriateness would be useful in boosting student motivation (Ertürk, 1991; Stroet vd., 2013).

In this regard, evaluating the existing state is considerably important to identify the measures to be taken concerning student motivation. Therefore, it is necessary to determine the learners' evaluation of motivational study conditions. Thus, many conclusions could be drawn regarding the efficiency of instruction and its effects on student motivation. This would allow for receiving students' evaluation on the quality of instruction. In addition, it would be possible to see the extent that teaching practices affect student motivation in the light of student evaluations. In this way, teachers' competence in providing motivational study conditions can be revealed, and evidence-based suggestions could be made for planning relevant professional development activities.

Turkish literature includes a number of measurement tools concerning student evaluations of the learning climate (Çengel & Türkoğlu, 2015; Gezer & Şahin, 2017; Kanadlı & Bağçeci, 2016; Kandemirci, 2018; Sağkal, Kabasakal, & Türnüklü, 2015; Savaş & Demirkasımoğul, 2021). While some of these measurement tools focus on evaluating the school's learning climate (Savaş & Demirkasımoğul, 2021), some others look into the in-class learning climate (Çengel & Türkoğlu, 2015; Gezer & Şahin, 2017; Kanadlı & Bağçeci, 2016; Kandemirci, 2018; Sağkal vd., 2015). However, no comprehensive scale has been found to deal with the study conditions suggested by the theories of motivation in multiple dimensions. It is seen that there is a need for a measurement tool to determine students' evaluations of motivational study conditions in a multidimensional way in Turkish literature. The aim of the present study is to conduct the adaption of the Motivational Study Scale developed by Kauper et al., (2010) into Turkish and examine its psychometric properties. The adaptation of the scale into Turkish literature is significant for both defining the existing state and providing support for the academic studies to be conducted in the future.

METHOD

In this section, information about the original scale, the operations performed on the data obtained, and the studies carried out for criterion-related validity are explained in detail.

The Original Scale

Kauper et al., (2010) developed the Motivational Study Conditions Scale (MSCS) in German. The scale was developed to determine college students' assessments of motivational study conditions. The scale has four choices from Completely Disagree to Completely Agree. The scale has eight factors and 25 items. The factor names are Content Relevance, Instruction Quality, Instructor's Interest in the Content, Social Interaction, Competence Support, Autonomy Support, Excessive Workload /Difficulty and Instructor-Student Relationship. The second factor has four items and all other factors have three items. The factor scores can be calculated in themselves. The

minimum score of a factor can be three and the maximum score can be 12. These minimum and maximum values for the second factor are four and 16. Cronbach's Alpha reliability values of the original scale's factors are .80, .81, .86, .85, .82, .76, .80 and .86 respectively.

Translation Process

Necessary permissions for the adaptation of MSCS were taken via email. Later, translation studies were conducted; the items on the scale were first translated from German into Turkish by three experts and then three other specialists translated the items back into German. The items obtained from the translation-retranslation process were examined by the researcher, and another specialist who did not participate in the translation process, and items were selected. Based on the opinions of academicians, two from curriculum and instruction, one from guidance and psychological counselling and one from Turkish education, the items obtained were given their final form.

Sampling, Data Collection and Analysis

Permission from the Ethics Commission of a public university was received before starting to collect the data. An electronic form was prepared for data collection. Purposeful sampling was used to reach students with heterogeneous motivational study conditions (Erkuş, 2017). Data were collected from different faculties and departments. Data for AFA and DFA were collected separately. 352 students responded to the questionnaire during the first data collection period. These data were used for the AFA. After the AFA was completed, the second data collection period began, and 340 students participated. These 340 data were used for the DFA.

Of the students participating in the study, 232 (%34) marked their gender as female and 443 (64) as male, while 17 (%2) students left this question unanswered. Of the students who participated in the study from thirty different universities, 531 (%76) attended the faculty of education and 161 (%24) students attended other faculties. SPSS Statistics 25 (IBM Corp., 2017) and AMOS 23 (Arbuckle, 2018) programs were used for the analysis.

Criterion Validity

Learning Climate Questionnaire was adapted by Williams & Deci, (1996) from the Health-care Climate Questionnaire. The scale has a 15-item long form as well as a six-item short form. The scale aims to determine the students' perceived autonomy support in educational settings. The scale was adapted to Turkish by Kandemirci, (2018) for a sample of elementary students and by Kanadlı & Bağçeci, (2016) for university students. The Cronbach's Alpha of the single factorial scale was calculated as 0.89. In the present study, the short form of the questionnaire was used to achieve criterion validity.

RESULTS

In this section, the findings obtained from data analyses are presented. Exploratory factor analysis was performed in the first place in order to see if the original eight-factor construct of the MSCS applied to the Turkish form or not. Since the KMO test result was found as .90, and Bartlett test result was significant ($p < .001$), it was concluded that correlations between items were suitable for factor analysis with the number of items per factor (Leech, Barrett, & Morgan, 2014). Since factors are expected to correlate with each other theoretically (Deci & Ryan, 2017; Nakamura & Csikszentmihalyi, 2002), the factor analysis was continued using Promax among oblique rotations. The eight-factor construct appears to explain 71% of the total variance. The distribution of factor loadings of the items can be seen in Table 1.

Table 1. Factor Loadings of the Items Obtained from the Exploratory Factor Analysis (n=352)

		1	2	3	4	5	6	7	8
ISR	Instructor-Student Relationship 2	.92							
	Instructor-Student Relationship 3	.87							
	Instructor-Student Relationship 1	.76							
CR	Content Relevance 2		.74						
	Content Relevance 1		.72						
	Content Relevance 3		.56						
IIC	Instructor's Interest in the Content 2			.82					
	Instructor's Interest in the Content 3			.71					
	Instructor's Interest in the Content 1			.50					
IQ	Instruction Quality 4				.85				
	Instruction Quality 2				.70				
	Instruction Quality 3				.60				
	Instruction Quality 1				.49				
EW/D	Excessive Workload /Difficulty 2					.87			
	Excessive Workload /Difficulty 3					.84			
	Excessive Workload /Difficulty 1					.78			
SI	Social Interaction 3						.90		
	Social Interaction 1						.87		
	Social Interaction 2						.46		
AS	Autonomy Support 3							.81	
	Autonomy Support 1							.80	
	Autonomy Support 2							.64	
CS	Competence Support 3								.81
	Competence Support 2								.59
	Competence Support 1								.52

In Table 1, it is seen that item factor loadings range between .55 and .86. In order to confirm this construct obtained from the exploratory factor analysis, confirmatory factor analysis was employed. The goodness of fit values obtained are given in Table 2, and the standardized values in Figure 1.

Table 2. Confirmatory Factor Analysis Results for the MSCS (n=340)

Fit Indices	Good Fit*	Reasonably Good Fit*	Other Values concerning the Scale
RMSEA	0<RMSEA<0.05	0.05<RMSEA<0.08	.057
SRMR	0<SRMR<0.05	0.05<SRMR<0.1	.055
NNFI	0.97<NNFI<1	0.95<NNFI<0.97	.92
CFI	0.97<CFI<1	0.95<CFI<0.97	.94
χ^2			508**
sd			244
χ^2 /sd	<3	<5	2.08

* (Jöreskog & Sörbom, 2015; Şimşek, 2007)** $p < .01$

Figure 1. The results of confirmatory factor analysis (Standardized results)

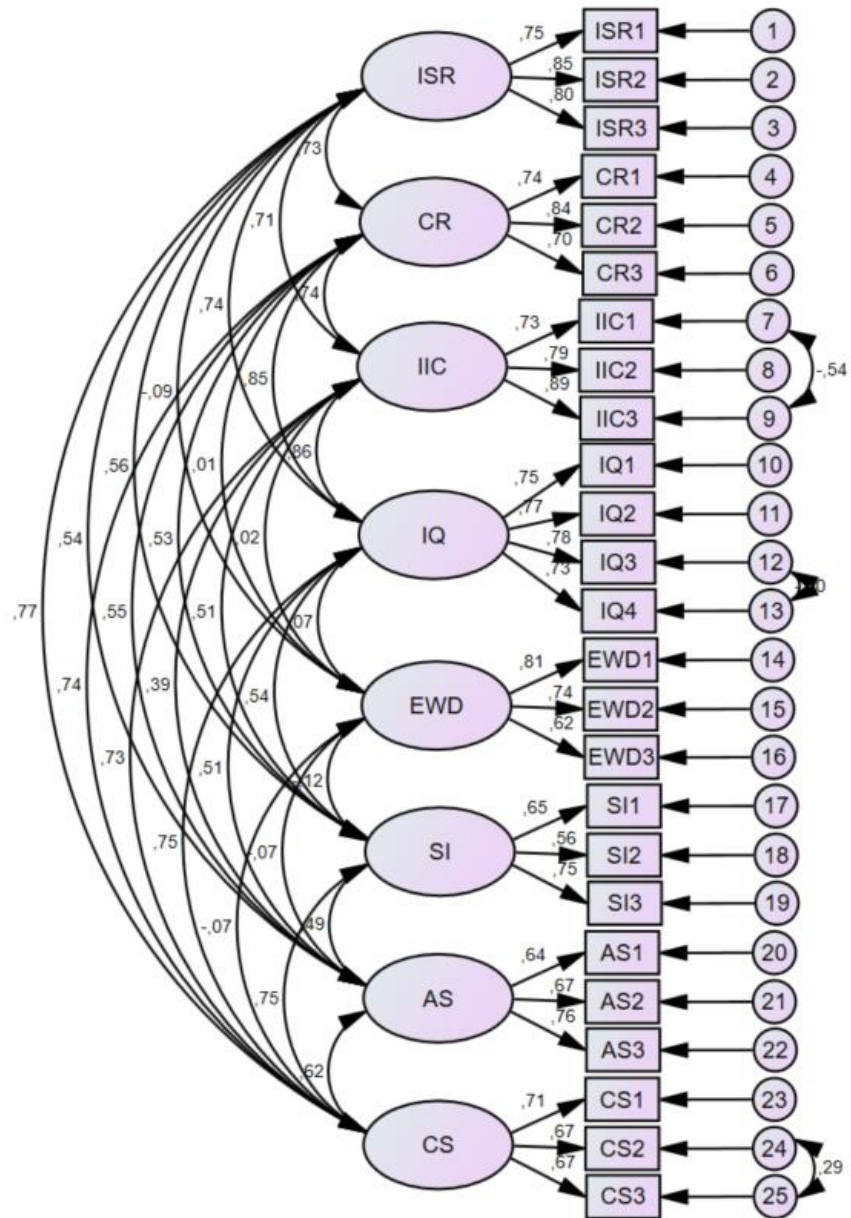


Table 2 shows that the values indicating the fitness of the built factor structure with the data are within acceptable limits or very close to these limits. In this regard, it could be concluded that the factor structure is confirmed (Jöreskog & Sörbom, 2015; Şimşek, 2007). The three of the modification indices suggested during the confirmatory factor analysis were added to the model in order and these modifications are indicated in Figure 1. The factors are listed at the Figure 1 as the same in the Table 1. The factor loading at the Figure 1 change between .62 and .89. The factor loading above .40 can be acceptable (Leech vd., 2014).

Reliability and Validity

Construct validity concerning whether the Motivational Study Conditions Scale measured the intended structure or not was examined with the methods of a) convergent validity and b) discriminant validity as a different version of divergent validity. In addition, reliability values for the internal consistency of the data provided with the measurement tool were tested using both composite reliability and Cronbach's Alpha coefficient.

Table 3. Reliability and Average Variance Extracted (AVE) Values of the Data from MSCS

Dimensions	Number of Items	Alpha	Construct (Composite) Reliability	AVE
Instructor-Student Relationship	3	.88	.89	.73
Relevance of Content	3	.80	.71	.46
Instructor's Interest in the Content	3	.81	.72	.56
Teaching Quality	4	.81	.76	.55
Excessive Workload/Difficulty	3	.80	.87	.73
Social Interaction	3	.70	.80	.64
Autonomy Support	3	.70	.79	.63
Competency Support	3	.69	.68	.52

In Table 3, Alpha coefficient of internal consistency (Cronbach, 1951) and construct (composite) reliability were achieved for the data obtained from the concerning scale. Measurement results can be asserted to be reliable as both values are higher than .70 (George & Mallery, 2019). For convergent validity, factor loadings and AVE values are suggested to be higher than .50; however, when construct reliability values are over .60,

AVE values of over .40 can also be acceptable (Fornell & Larcker, 1981; Huang, Wang, Wu, & Wang, 2013). In this regard, it could be said that convergent validity was ensured for the MSCS.

For discriminant validity, on the other hand, correlations among the sub-scales of the MSCS and square roots of AVE values were used and the data obtained are presented in Table 4. Accordingly, AVE values of one sub-dimension must not be smaller than the correlation between that sub-dimension and others must be higher than .50 (Fornell & Larcker, 1981).

Table 4. Descriptive Statistics, Correlations between Sub-scales and Square roots of AVE Values of the Motivational Study Conditions Scale

	\bar{X}	S	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
1. Instructor-Student Relationship	3.11	0.61	.85							
2. Relevance of Content	3.28	0.63	.56	.68						
3. Instructor's Interest in the Content	3.11	0.61	.58	.65	.75					
4. Instruction Quality	3.19	0.55	.61	.68	.67	.74				
5. Excessive Workload/Difficulty	2.56	0.75	-.20	-.09	-.09	-.12	.80			
6. Social Interaction	2.97	0.62	.35	.33	.29	.32	-.24	.85		
7. Autonomy Support	3.16	0.62	.40	.40	.32	.33	-.20	.42	.79	
8. Competence Support	2.84	0.62	.50	.57	.51	.54	-.16	.52	.45	.72

On the right side of the table, the correlation matrix between the sub-scales of the MSCS is shown. The square root of AVE is shown by the diagonal elements of the correlation matrix (values in bold) whereas the correlation values between the sub-scales are indicated by the non-diagonal elements. As seen in Table 4, the square root of the AVE values calculated from each sub-scale is larger than or close to the correlation values with other sub-scales (shared variance). In addition to the correlations of the

subscales with each other, their correlations with the total score were also calculated. The results are shown in Table 5.

Table 5. Correlations between the Sub-scales and Total score of the Motivational Study Conditions Scale

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
[1] Social Interaction	1							
Competency	.56*	1						
[2] Support								
[3] Autonomy Support	.40*	.48*	1					
Instructor-Student	.51*	.66*	.51*	1				
[4] Relationship								
Relevance of	.50*	.63*	.46*	.66*	1			
[5] Content								
[6] Teaching Quality	.54*	.67*	.44*	.69*	.73*	1		
Instructor's Interest	.51*	.65*	.47*	.68*	.73*	.81*	1	
[7] in the Subject								
Excessive	-.02	.03	-.05	-.01	.10	.13*	.08	1
[8] Workload/Difficulty								
Total score	.69*	.81*	.64*	.82*	.83*	.87*	.85*	.24*

Table 5 shows that all subscales have meaningful correlation with the total score. Almost all correlations with the total score are moderate or high. Teaching Quality has the highest correlation with the total score, while Workload/Difficulty has the lowest correlation.

Criterion-related Validity

In order to evaluate the criterion-related validity, the correlation between the sub-scales of the motivational study conditions scale and the Learning Climate Questionnaire was examined and the results obtained are presented in Table 6.

Table 5. Correlations between the MSC Scale and Learning Climate Questionnaire

		Social Interaction	Competence Support	Autonomy Support	Instructor Student Relationship	Content Relevance	Instruction Quality	Instructor's Interest in the Content	Excessive Workload
Learning Climate Questionnaire	r	.47	.62	.39	.67	.60	.66	.66	-.01
	p	.00*	.00*	.00*	.00*	.00*	.00*	.00*	.89
	n	304	304	304	304	304	304	304	304

* $p < .01$

As seen in Table 6, there is a positive and significant correlation between all the Learning Climate Questionnaire and the MSC Scale except for excessive workload/difficulty. The highest significant correlation with the Learning Climate Questionnaire is in the Instructor-Student Relationship sub-scale ($r^2=.45$). This means that 45 percent of the variance on the Instructor-Student Relationship sub-scale comes from the results of the Learning Climate Questionnaire. The lowest significant with the Learning Climate Questionnaire is in the Autonomy Support sub-scale ($r^2=.15$). This means that 15 percent of the variance on the Autonomy Support sub-scale comes from the results of the Learning Climate Questionnaire. However, no significant relation was found between the Learning Climate Questionnaire and the Excessive Workload/Difficulty sub-scale of the MSC Scale.

DISCUSSION, CONCLUSION AND IMPLICATIONS

Student motivation is among the key variables for the curriculum to achieve its objectives. The decrease in student motivation brought about by the global pandemic has been one of the most critical problems in instruction. In order to support learners' motivation in the learning and teaching processes, study conditions must have certain qualities (Kauper vd., 2010; Stroet vd., 2013). Many theories and researchers have explained the qualities that motivational study conditions should possess (Deci & Ryan,

2017; Hornstra vd., 2021; Nakamura & Csikszentmihalyi, 2002). Kauper et al., (2010) define motivational study conditions as environments where autonomy, relatedness and competence are supported, workload and difficulty levels are appropriate for students, the content attracts students' interest and the quality of instruction is prominent.

This study aimed at producing the Turkish form of the MSC scale and examining the suitability of the obtained form to the socio-cultural structure of Turkey in terms of its psychometric properties. The process included two stages as adaptation and implementation. In the adaptation process, the Turkish form was obtained from the original form in German (Kauper vd., 2010), and in the implementation stage, using the Turkish form obtained, the psychometric properties of the data collected from 692 university students were identified.

It is recommended that exploratory factor analyses be used to examine construct validity in scale adaptation studies (Deniz, 2007). Öztürk et al., (2015) report that EFA and CFA are frequently used in combination in scale adaptation studies. It is considered appropriate to draw conclusions about the factor structure of the scale as a result of EFA and CFA conducted with different samples (Erkuş, 2017). Therefore, exploratory and confirmatory factor analyses were used together in the present study. The results of the exploratory factor analysis yielded an eight-factor structure for the Turkish form similar to the original scale. Item factor loadings ranged between .55 and .86. These values are accepted as considerably high (Leech vd., 2014). Since the values obtained from the confirmatory factor analysis fell within the acceptable limits or were very close to these limits, the factor structure of the scale was concluded to be confirmed for the Turkish form of the scale as well (Jöreskog & Sörbom, 2015; Şimşek, 2007).

For the reliability findings of the scale, reliability was employed for internal consistency, while construct validity was used for the validity findings. The Alpha values were found to be over .69, indicating that the items form a scale with reasonable internal consistency reliability (Cronbach, 1951; Kalaycı, 2008). Composite reliability coefficients were also consistent with the alpha reliability values. As for construct

validity, convergent validity and discriminant validity in the context of divergent validity were examined, and acceptable values were obtained (Fornell & Larcker, 1981).

In order to test the criterion-related validity of the MSCS, the correlations with the Learning Climate Questionnaire were examined. When considered on the basis of sub-scales, significant correlations were found between the Learning Climate Questionnaire and all sub-scales except for excessive workload/difficulty. Similar to motivational study conditions, learning climate is also expected to be correlated with student motivation (Deci & Ryan, 2017; Kandemirci, 2018). In this regard, the significant correlation values found between the MSCS and Learning Climate Questionnaire can be interpreted as the criterion-related validity was achieved.

Significant correlations of moderate to high level between the subscales and the total scale scores of the scale can be seen in Table 5. The states of satisfaction of motivational study conditions in the class are expected to correlate with one another (Deci & Ryan, 2017, 2020). Teachers supporting autonomy should also support their students' needs for relatedness and competence because teachers who promote their students' autonomy can understand students' perspectives and start acting accordingly when the students feel needs for relatedness and competence (Deci & Ryan, 2017). Moreover, content that attracts students' interest, perceived quality of instruction and the instructor's interest in the content support students' perceptions of competence (Hornstra vd., 2021; Stroet vd., 2013). On the other hand, the quality of instruction and content relevance would affect student motivation positively by encouraging the student to stay in the flow (Engeser, 2012; Nakamura & Csikszentmihalyi, 2002). Among the subscales, only Excessive Workload/Difficulty has a low level of significant correlation with the quality of instruction. Based on this finding, it could be suggested that high quality instructional practices are related to an optimal level of difficulty perceived by students.

In conclusion, in the light of all these findings, it could be claimed that the obtained Turkish form of the MSCS can determine university students' evaluations concerning motivational study conditions. The scale, which was adapted to Turkish, is expected to

contribute to studies on exploring the variables that affect student motivation. In addition, the scale can be used in research aiming to assess the quality of instruction. Thus, it would be possible to provide evidence-based suggestions in planning professional development programs for teachers. Moreover, the scale can be used for evaluating in-class practices when determining the efficiency of professional development programs concerning student motivation to be conducted for teachers. It can be recommended that the psychometric properties of the scale be examined for students at elementary and secondary education levels as well.

REFERENCES

- Arbuckle, J. L. (2018). *Amos*. Chicago: IBM SPSS.
- Aytaç, T. (2021). The problems faced by teachers in Turkey during the COVID-19 pandemic and their opinions. *International Journal of Progressive Education*, 17(1), 404–420. <https://doi.org/10.29329/ijpe.2020.329.26>
- Çengel, M., & Türkoğlu, A. (2015). Classroom climate perceived by students scale: A validity and reliability study. *Journal of Theory and Practice in Education*, 11(4), 1240–1257.
- Clark, M. H., Middleton, S. C., Nguyen, D., & Zwick, L. K. (2014). Mediating relationships between academic motivation, academic integration and academic performance. *Learning and Individual Differences*, 33, 30–38. <https://doi.org/10.1016/j.lindif.2014.04.007>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Springer Science+Business Media.
- Deci, E. L., & Ryan, R. M. (2017). *Self Determination Theory*. New York: Guilford Press. [https://doi.org/10.1016/S0278-5846\(03\)00119-2](https://doi.org/10.1016/S0278-5846(03)00119-2)
- Deci, E. L., & Ryan, R. M. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Deniz, Z. (2007). Psikolojik ölçme aracı uyarlama. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 40, 001–016. https://doi.org/10.1501/egifak_0000000158
- Engeser, S. (2012). *Advances in Flow Research*. New York : Springer.
- ERG. (2020). Türkiye’de Koronavirüsün Eğitime Etkileri – III | Uzaktan eğitimin ilk iki haftası nasıl geçti? <https://www.egitimreformugirisimi.org/turkiyede-koronavirusun-egitime-etkileri-iii-uzaktan-egitimin-ilk-iki-haftasi-nasil-gecti/adresinden-erişilmiştir>.
- ERG. (2021). Türkiye’de Koronavirüsün Eğitime Etkileri VIII | Seyreltilmiş yüz yüze eğitim nasıl geçiyor? Tarihinde <https://www.egitimreformugirisimi.org/turkiyede-koronavirusun-egitime-etkileri-viii-seyreltilmis-yuz-yuze-egitim-nasil-geciyor/>

adresinden erişilmiştir.

- Erkuş, A. (2017). Ölçek geliştirme ve uyarlama çalışmalarındaki sorunlar ile yazım ve değerlendirilmesi. İçinde Ö. Demirel & S. Dinçer (Ed.), *Eğitim Bilimlerinde Yenilik ve Nitelik Arayışı* (2. baskı, ss. 1212–1224). Ankara: Pegem A Yayıncılık. <https://doi.org/9786053183563b02.074>
- Ertürk, S. (1991). *Eğitimde program geliştirme* (Altıncı Ba). Ankara: Meteksan Yayınları.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference* (16th baskı). London: Taylor & Francis.
- Gezer, M., & Şahin, İ. F. (2017). Sınıf İklimi Ölçeği Kısa Formunun Türkçe Geçerlik ve Güvenirlik Çalışması. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 17(2), 693–715.
- Gnambs, T., & Hanfstingl, B. (2016). The decline of academic motivation during adolescence: an accelerated longitudinal cohort analysis on the effect of psychological need satisfaction. *Educational Psychology*, 36(9), 1698–1712. <https://doi.org/10.1080/01443410.2015.1113236>
- Gold, J., & Ciorciari, J. (2020). A review on the role of the neuroscience of flow states in the modern world. *Behavioral Sciences*, 10(9). <https://doi.org/10.3390/BS10090137>
- Haakma, I., Janssen, M., & Minnaert, A. (2017). The influence of need-supportive teacher behavior on the motivation of students with congenital deafblindness. *Journal of Visual Impairment and Blindness*, 111(3), 247–260. <https://doi.org/10.1177/0145482x17111100305>
- Hornstra, L., Stroet, K., & Weijers, D. (2021). Profiles of teachers' need-support: How do autonomy support, structure, and involvement cohere and predict motivation and learning outcomes? *Teaching and Teacher Education*, 99. <https://doi.org/10.1016/j.tate.2020.103257>
- Huang, C.-C., Wang, Y.-M., Wu, T.-W., & Wang, P.-A. (2013). An empirical analysis of the antecedents and performance consequences of using the moodle platform. *International Journal of Information and Education Technology*, 3(2), 217–221. <https://doi.org/10.7763/ijiet.2013.v3.267>

- IBM Corp. (2017). *IBM SPSS statistics for windows, version 25.0*. Armonk, NY: IBM Corp.
- Jöreskog, K. G., & Sörbom, D. (2015). *Lisrel 8: Structural equation modeling with the simplis command language* (5th baskı). Lincolnwood: Scientific Software International. <https://doi.org/http://dx.doi.org/10.1016/j.jconrel.2016.01.005>
- Kalaycı, Ş. (2008). *SPSS uygulamalı çok değişkenli istatistik teknikleri* (3. baskı). Ankara: Asil Yayın Dağıtım.
- Kanadlı, S., & Bağçeci, B. (2016). The Teachers' Interpersonal Motivating Styles: The Turkish Version of the Learning Climate Questionnaire. *Anadolu University Journal of Social Sciences*, 16(1), 1–12.
- Kandemirci, D. (2018). *Sınıf Öğretmenlerine Yönelik Özerklik Desteği Eğitim Programının Etkililiğinin İncelenmesi*. Ege Üniversitesi, İzmir.
- Kauper, T., Retelsdorf, J., Bauer, J., Rösler, L., Möller, J., Prenzel, M., & Drechsel, B. (2010). PaLea – Panel zum Lehramtsstudium. Ein Forschungsprojekt zur professionsbezogenen Entwicklung Lehramtsstudierender im Studienverlauf. Vortrag gehalten auf dem. 22. *Kongress der Deutschen Gesellschaft für Erziehungswissenschaft (DGfE)*, 65. Mainz.
- Keller, J., & Landhäußer, A. (2012). The Flow Model Revisited. İçinde S. Engeser (Ed.), *Advances in Flow Research* (ss. 51–64). New York: Springer.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2014). SPSS for intermediate statistics: Use and interpretation. İçinde *Igarss 2014* (2nd baskı). New Jersey, London. <https://doi.org/10.1007/s13398-014-0173-7.2>
- Lepper, M. R., Corpus, J. H., & Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and academic correlates. *Journal of Educational Psychology*, 97(2), 184–196. <https://doi.org/10.1037/0022-0663.97.2.184>
- Nakamura, J., & Csikszentmihalyi, M. (2002). The Concept of Flow. İçinde C. Snyder & S. J. Lopez (Ed.), *Handbook of Positive Psychology* (ss. 89–105). New York: Oxford University Press.
- Nalbantoğlu Yazıcılar, Ü. (2021). *Öğretim Programını Sınıfa Uyarlama Becerilerine Yönelik Bir Mesleki Gelişim Programının Öğretmenlere Katkılarının İncelenmesi*. Ege Üniversitesi , İzmir.
- Otundo, J. O., & Garn, A. C. (2019). Student interest and engagement in middle school physical education: Examining the role of needs supportive teaching.

International Journal of Educational Psychology, 8(2), 137–161.
<https://doi.org/10.17583/ijep.2019.3356>

Öztürk, N. B., Eroğlu, M. G., & Kelecioğlu, H. (2015). A review of articles concerning scale adaptation in the field of education. *Eğitim ve Bilim*, 40(178), 123–137.
<https://doi.org/10.15390/EB.2015.4091>

Reeve, John Marshall. (2006). What Autonomy-Supportive Teachers Do and Why Their Students Benefit. *The Elementary School Journal*, 106(3), 225–236.

Reeve, Johnmarshall, Bolt, E., & Cai, Y. (1999). Autonomy-supportive teachers: How they teach and motivate students. *Journal of Educational Psychology*, 91(3), 537–548. <https://doi.org/10.1037/0022-0663.91.3.537>

Reeve, Johnmarshall, & Jang, H. (2006, Şubat). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, C. 98, ss. 209–218. <https://doi.org/10.1037/0022-0663.98.1.209>

Reeve, Johnmarshall, & Tseng, C. M. (2011). Cortisol reactivity to a teacher's motivating style: The biology of being controlled versus supporting autonomy. *Motivation and Emotion*, 35(1), 63–74. <https://doi.org/10.1007/s11031-011-9204-2>

Sağkal, A. S., Kabasakal, Z. T., & Türnüklü, A. (2015). Sınıf iklimi envanteri'nin (SİE) Türkçe'ye uyarlanması. *Elementary Education Online*, 14(4), 1179–1192.
<https://doi.org/10.17051/ieo.2015.30422>

Savaş, G., & Demirkasımoğlu, N. (2021). Okullarda Öğrenme İklimi Ölçeği'nin (OÖİÖ) Geliştirilmesi: Geçerlik ve Güvenirlik Çalışması. *Pamukkale University Journal of Education*, (52), 1–32. <https://doi.org/10.9779/pauefd.781446>

Sheldon, K. M., & Ryan, R. M. (2011). Positive Psychology and Self-Determination Theory: A Natural Interface. İçinde R. M. and S. K. M. Chirkov Valery I. and Ryan (Ed.), *Human Autonomy in Cross-Cultural Context: Perspectives on the Psychology of Agency, Freedom, and Well-Being* (ss. 33–44). Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-90-481-9667-8_2

Şimşek, Ö. F. (2007). *Yapısal eşitlik modellemesine giriş (Temel ilkeler ve LISREL uygulamaları)*. Ankara: Ekinoks.

Skinner, E. A., & Chi, U. (2012). Intrinsic motivation and engagement as “active ingredients” in garden-based education: Examining models and measures derived from self-determination theory. *Journal of Environmental Education*, 43(1), 16–36. <https://doi.org/10.1080/00958964.2011.596856>

- Stroet, K., Opendakker, M. C., & Minnaert, A. (2013). Effects of need supportive teaching on early adolescents' motivation and engagement: A review of the literature. *Educational Research Review*, *9*, 64–87. <https://doi.org/10.1016/j.edurev.2012.11.003>
- Tekin, E. (2020). COVID- 19 kaygısının motivasyon üzerindeki etkisi : Z kuşağı üzerine bir araştırma / The effect of COVID-19 anxiety on motivation : An investigation on generation Z. *Turkish Studies*, *15*(4), 1129–1145.
- Theis, D., Sauerwein, M., & Fischer, N. (2020). Perceived quality of instruction: The relationship among indicators of students' basic needs, mastery goals, and academic achievement. *British Journal of Educational Psychology*, *90*(S1), 176–192. <https://doi.org/10.1111/bjep.12313>
- Troyer, M. (2019). “And then my creativity took over”: Productivity of teacher adaptations to an adolescent literacy curriculum. *The Elementary School Journal*, *119*(3), 351–385. <https://doi.org/10.1086/701719>
- Tsai, Y. M., Kunter, M., Lüdtke, O., Trautwein, U., & Ryan, R. M. (2008). What Makes Lessons Interesting? The Role of Situational and Individual Factors in Three School Subjects. *Journal of Educational Psychology*, *100*(2), 460–472. <https://doi.org/10.1037/0022-0663.100.2.460>
- Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students : A test of Self-Determination Theory. *Journal of Personality and Social Psychology*, *70*(4), 767–779.

GENİŞ ÖZET

Son yıllarda küresel salgının da etkileriyle birlikte öğrencilerin hem motivasyon seviyesinin düştüğü hem de içsel motivasyonun bu durumdan olumsuz etkilendiği görülmektedir. Bu nedenle öğrenci motivasyonunu etkileyen etmenlerin ortaya çıkarılmasına yönelik araştırmalar oldukça önemlidir. Motivasyonu açıklamaya çalışan kuramlardan birisi olan öz belirleme kuramına göre bireylerde üç temel motivasyon türü bulunmaktadır. Bunlar içsel, dışsal ve amotivasyondur. Bireylerin motivasyon türleri üzerinde etkili olan önemli etmenlerden birisi ise psikolojik ihtiyaçlardır. Bu ihtiyaçlar özerklik, yeterlik ve ilişkili olmadır. Motivasyona ilişkin bir diğer önemli kuram ise akış teorisidir. Akış etkinlik sırasında bir bireyin odaklanarak etkinliğe tamamen dâhil olduğunu ve süreçten keyif aldığını belirtmektedir.

Bu kuramlar ışığında öğrenci motivasyonu açısından öğretimin kalitesi ön plana çıkmakta, öğretmenlerden öğrenci öğrenmesini destekleyecek etkinlikleri işe koşmaları beklenmektedir. Motivasyonu destekleyebilmesi için çalışma koşullarının öğrencilerin psikolojik ihtiyaçlarını karşılaması, akışın korunacak şekilde düzenlenmesi önemlidir. Bu açıdan öğrencilere özerklik sunan, yeterliliğini ve ilişkili olma ihtiyacını destekleyen, uygun zorlukta olan ve yeterli geri bildirim sağlanan çalışma koşulları öğrenci motivasyonunu olumlu etkileyecek, içsel motivasyonu destekleyecek, öğrencilerin psikolojik iyi oluşlarına katkı getirecektir. Çalışma koşullarının öğrenci motivasyonunu destekleyebilmesi için içeriğin öğrenciler için uygun olması, öğretimin kalitesi, öğretmenin konuya ilgisi ve derse ilişkin görevlerin ideal zorlukta olmasının oldukça önemlidir.

Türkçe alanyazında motivasyon kuramlarının önerdiği çalışma koşullarını çoklu boyutlar hâlinde bir arada ele alan kapsayıcı bir ölçeğe rastlanmamıştır. Bu nedenle araştırmanın amacı Kauper vd. (2010) tarafından geliştirilen Motivasyonel Çalışma Koşulları Ölçeği'nin (MÇKÖ) Türkçeye uyarlanması ve psikometrik özelliklerinin incelenmesidir. MÇKÖ'nün Türkçe alanyazına kazandırılması hem var olan durumun belirlenebilmesi hem de bundan sonra yürütülecek olan akademik çalışmaların desteklenmesi açısından önemli katkılar sunacaktır.

MÇKÖ'nün uyarlanması için izinler alınmış, çeviri tekrar çeviri, madde seçimi ve uzman görüşü aşamaları takip edilerek Türkçe form oluşturulmuştur. Türkçe formun psikometrik özelliklerinin üniversite öğrencileri için geçerli olup olmadığının belirlenmesi amacıyla 692 veri toplanmıştır. Araştırmaya katılan öğrencilerin 232'si cinsiyetini kadın 443'ü ise erkek olarak belirtmiş, 16 öğrenci bu soruyu yanıtlanmamıştır. Otuz ayrı üniversiteden araştırmaya katılan öğrencilerin 531'i eğitim fakültesinde, 161'i ise diğer fakültelerden öğrenim görmektedir. İlk etapta toplanan 352 veri üzerinden açımlayıcı faktör analizleri gerçekleştirilmiş, sonrasında toplanan 340 veri üzerinden doğrulayıcı faktör analizleri yürütülmüştür.

İlk olarak açımlayıcı faktör analizi yapılmıştır. Faktörlerin kuramsal olarak ilişkili olması beklendiğinden eğik döndürmelerden Promaks kullanılarak yapılmıştır. Sekiz faktörlü yapının toplam varyansın %71'ini açıkladığı görülmektedir. Madde faktör yükleri .46 ila .92 arasında değişmektedir. Doğrulayıcı faktör analizi sonucunda ise elde edilen uyum iyiliklerinin kabul edilebilir sınırlar içinde yada bu sınırlara çok yakın olduğu görülmektedir (RMSEA:.057, SRMR:.055, NNFI:.92, CFI:.94, χ^2 :508, sd:244).

MÇKÖ'ye ilişkin yapı geçerliği yakınsama geçerliği ve iraksama geçerliğinin farklı bir versiyonu olan ayırt edici geçerlilik teknikleri yöntemiyle incelenmiştir. Bununla birlikte ölçme aracıyla

sağlanan verilerin iç tutarlılığına ilişkin güvenilirlik değerleri hem yapı güvenirliliği hem de Cronbach Alfa katsayısı yoluyla test edilmiştir.

Ölçme sonuçları alfa iç geçerlik ve yapı geçerli değerlerinin .69'dan büyük olduğunu göstermektedir. Yakınsama geçerliği için ise açıklanan ortalama varyans değerleri .40'ın üzerinde bulunmuştur. Ayırt edici geçerlik için alt boyutlar arasındaki korelasyon değerlerinin açıklanan ortalama varyans değerlerinin karekökünden ve .50'den büyük olduğu görülmüştür.

Ölçüte dayalı geçerliğin incelenmesi amacıyla motivasyonel çalışma koşulları ölçeğinin alt boyutları ile öğrenme iklimi ölçeği arasındaki korelasyon incelenmiş aşarı iş yükü hariç bütün alt boyutları arasında anlamlı ve pozitif yönlü bir ilişki olduğu görülmektedir.

Sonuç olarak tüm bu veriler ışığında, elde edilen MÇKÖ'nün Türkçe formun üniversite öğrencilerinin motivasyonel çalışma koşullarına ilişkin değerlendirmelerini belirlediği söylenebilir. Türkçeye uyarlanan ölçeğin öğrenci motivasyonunu etkileyen değişkenlerin ortaya çıkarılmasına yönelik araştırmalara katkı getirmesi beklenmektedir. Ayrıca bu ölçek öğretimin kalitesinin belirlenmesine yönelik araştırmalarda da kullanılabilir. Böylece öğretmenlere yönelik mesleki gelişim programlarının planlanmasında kanıt dayalı öneriler sunulabilecektir. Bununla birlikte ölçek öğretmenlere yönelik yürütülecek olan öğrenci motivasyonuna ilişkin mesleki gelişim programlarının etkililiğinin belirlenmesinde sınıf içi uygulamaların değerlendirilmesi aşamasında kullanılabilir. Bu ölçeğin psikometrik özellikleri üniversite öğrencileri örnekleminde incelenmiştir. Ölçeğin psikometrik özelliklerinin ilköğretim ve ortaöğretim düzeyindeki öğrenciler için incelenmesi de önerilebilir.

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Conflict of Interest

The researchers do not have any personal or financial conflicts of interest with other individuals or institutions related to the research.

Ethics Committee Declaration

This study was conducted with the approval of Ege University Ethics Commission dated 30.09.2021 and numbered 12/06.

Appendix 1



**EGE ÜNİVERSİTESİ SOSYAL VE BEŞERİ BİLİMLER
BİLİMSEL ARAŞTIRMA VE YAYIN ETİĞİ KURULU
KARAR BELGESİ**

Ek-4

YÜRÜTÜCÜNÜN ADI SOYADI / KURUMU	Doç. Dr. Öner USLU / Eğitim Fakültesi	
DANIŞMANIN ADI SOYADI / KURUMU	-	
DİĞER ARAŞTIRMACILAR	-	
ARAŞTIRMANIN TÜRÜ	<input type="checkbox"/> Yüksek Lisans Tezi <input type="checkbox"/> Doktora Tezi <input checked="" type="checkbox"/> Özgün Araştırma	
ARAŞTIRMANIN BAŞLIĞI	Motivasyonel Çalışma Koşulları Ölçeğinin Türkçe'ye Kültürel Uyarlanması	
BİLİRKİŞİ GÖRÜŞÜ	Yok	
KARARIN ALINDIĞI TOPLANTI TARİHİ	30.09.2021	
TOPLANTI / KARAR SAYISI	12/06	PROTOKOL NO: 1111
KARAR	Araştırma, OYBİRLİĞİ ile etik açıdan uygun bulunmuştur.	

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