



Self-efficacy Perceptions Scale for Reading Comprehension of 4th Grade Students in Primary School: Validity and Reliability Study

Sultan Selen KULA^{*a}, Yusuf BUDAK^b

Article Info

DOI: 10.14686/buefad.536885

Article History:

Received: 07.03.2019
Accepted: 09.12.2019
Published: 01.02.2020

Keywords:

Reading comprehension,
Self efficacy,
Scale developing.

Article Type:

Research Article

Abstract

The aim of this study is to develop a data collection tool to determine the self-efficacy perceptions of 4th grade students in reading comprehension. The study group consisted of 525 primary school fourth grade students randomly selected. The study was designed in the survey model. The process for the development of appropriate measuring tool has been systematically monitored. For the scope validity of the scale, the relevant theoretical field was screened and expert opinions were consulted. Exploratory and confirmatory factor analysis were performed to determine the construct validity of the scale. In one-dimensional structure, Cronbach-Alpha internal consistency coefficient of the scale consisting of triple likert type and 29 items was determined as .918. According to these findings, it can be said that the scale measures the self-efficacy perceptions of the 4th grade students in reading comprehension, validly and reliably.

İlkokul 4. Sınıf Öğrencilerinin Okuduğunu Anlamaya İlişkin Öz Yeterlik Algıları Ölçeği: Geçerlik ve Güvenirlik Çalışması

Makale Bilgisi

DOI: 10.14686/buefad.536885

Makale Geçmişi:

Geliş: 07.03.2019
Kabul: 09.12.2019
Yayın: 01.02.2020

Anahtar Kelimeler:

Okuduğunu anlama,
Öz yeterlik,
Ölçek geliştirme.

Makale Türü:

Araştırma Makalesi

Öz

Bu çalışmanın amacı, ilkököl 4. sınıf öğrencilerinin okuduğunu anlamaya ilişkin öz yeterlik algılarını belirlemek için bir veri toplama aracı geliştirmektir. Araştırmanın çalışma grubunu rastlantısal olarak seçilen 525 ilkököl dördüncü sınıf öğrencisi oluşturmaktadır. Araştırma tarama modelinde tasarlanmıştır. Ölçme aracının geliştirilmesi için uygun olan süreç sistematik olarak izlenmiştir. Ölçeğin kapsam geçerliği için ilgili alan yazın taranmış ve uzman görüşlerine başvurulmuştur. Ölçeğin yapı geçerliğinin belirlenmesi amacıyla açıklayıcı ve doğrulayıcı faktör analizi yapılmıştır. Tek boyutlu bir yapıda, üçlü likert tipi ve 29 maddeden oluşan ölçeğin Cronbach-Alfa iç tutarlılık katsayısı .918 olarak belirlenmiştir. Bu bulgular doğrultusunda ölçeğin, ilkököl 4. sınıf öğrencilerinin okuduğunu anlamaya ilişkin öz yeterlik algılarını geçerli ve güvenilir şekilde ölçer nitelikte olduğu söylenebilir.

*Corresponding Author: selenyazgunoglu@windowslive.com

^a Assist. Prof. Dr., Ahi Evran University, Faculty of Education, Educational Sciences, Kirsehir, <http://orcid.org/0000-0002-1614-3431>

^b Prof. Dr., Gazi University, Faculty of Education, Educational Sciences, Ankara, <http://orcid.org/0000-0001-9625-204X>

Introduction

One of the important concepts that Bandura presents with Social Learning Theory is self-efficacy. Self-efficacy is the belief in one's own capacity to bring the level of learning and behavior to the required levels. It is emphasized that the creation and strengthening of self-efficacy perceptions affects the change of some behaviors (Bandura, 1977). Self-efficacy is the judgment that individuals have reached about their ability to achieve a job (Zimmerman 1995). Self-efficacy perception is effective for individuals to decide to do a job, to struggle with efforts and persistence (Schunk,1981). Different sources that affect individual self-efficacy can be mentioned. According to Bandura (1977), self-efficacy of individuals is nourished from 4 basic sources of information. These; direct experiences, indirect experiences, verbal persuasion and physiological conditions. The most influential factor among these sources is the direct experience of the individual. It is known that students' self-efficacy perceptions of any subject are influenced by their sense of achievement (Senemoğlu, 2009). For the student, the answer to the question "Can I succeed" reveals her/his self-efficacy perception (Viau, 2015). In this case, in the teaching-learning process, the students' feeling themselves successful about the subject, can strengthen the self-efficacy perception. Indirect experiences, which are the second source of self-efficacy belief, are the evaluations of peers based on the judgments formed by observing the behaviors and results of those peers. In this process, the individual compares her/his own performance and the performances of the people who exhibit similar features. At the end of this comparison, self-efficacy beliefs may develop either positively or negatively depending on whether or not the individual have the same results as the observed person. Verbal persuasion, which is another source affecting self-efficacy beliefs, is the suggestions and encouragement of individuals about possible successes or failures of a job. Verbal persuasion can affect the self-efficacy beliefs positively or negatively. Physiological conditions are the effects of individuals' expectations of success or failure on self-efficacy belief.

Bandura (1977), in the theory of behavioral change, argues that self-efficacy perception plays an active role in changing the behavior of the individual. The degree of self-sufficiency in a subject affects the level of determination and persistence. Many behaviors are primarily shaped in the person's way of thinking. Therefore, the students' beliefs about their own competences, the academic activities they decided to do willingly, their ability to regulate their learning, motivation levels and academic achievements affect the self-efficacy perception. People's self-efficacy beliefs are effective in trying and structuring their future prospects. Prospective ideas support the desire to work of people with high self-efficacy, provide positive guidance to them, and lead them to produce success scenarios. People who doubt their competences in one respect, portray failure scenarios in their eyes and focus on many things that go wrong. It is very difficult to succeed while struggling with self-doubt. In addition, when the perceived self-efficacy is higher, the person tends to struggle for higher targets and stands firmly in pursuit of the goals (Bandura, 1993).

In addition, self-efficacy perception enables students to persist and not give up even if they have failed situations (Lodewyk ve Winne, 2005; Maddux, 2002; Pajares, 2003 as cited in Bruning, Schraw and Norby, 2014). Children with a strong sense of competence about the subject given to them are expected to make great efforts to achieve the task. On the contrary, children who perceive themselves as inadequate tend to avoid given duty, reluctance, and give up quickly when they encounter difficulties (Schunk, 2011).

Self-efficacy beliefs affect people's sense of self-motivation, their way of thinking and their behavior. The self-efficacy belief ensures the occurrence of these states depending on four important processes. These processes are: cognitive, motivational, affective and selective processes (Bandura,1993,1994). The concept of self-efficacy, which is such an effective concept in all the processes students experience academically, is also seen as very important in the processes related to reading comprehension. It is possible to say that the students who have the ability to comprehend and interpret any text they read have their self-efficacy perceptions strengthened and developed.

Self-Efficacy Perception for Reading Comprehension

Comprehension means understanding what something means, what it points to. According to this, it is possible to synthesize new information with old information in the process of understanding which is a mental activity (TDK, 2005). Reading is a comprehension process. In other words, the main purpose of reading is to understand what is read and to make sense of it in the mind. The main function of reading is to perceive, to remember, to associate with previous information and thus to produce new information or in other words, new meanings. In this context, reading plays an important role in academic learning and enriching life. Accordingly, the process of

reading comprehension; contains a number of complex processes such as finding meaning, thinking on meaning, researching causes, extracting results and evaluating (Balçı, 2013). Since the cognitive structure of the reader, past experiences and pre-learning factors play an active role in the reading process, reading comprehension is a process that includes individual differences in this aspect. The constructivist approach explains the learning process in two dimensions: developmental and interactional. Developmental approach considers the process of reading as a process from preschool to advanced reading in advanced classes. On the other hand, interactive approach explains that reading takes place with variables such as text and environment interacting with the reader (Güneş, 2009). Therefore, it is possible to say that there are different approaches in making sense of reading comprehension process. On the basis of these approaches, it can be stated that both individual-related characteristics and reading-related environmental characteristics play a role in the process of reading comprehension. It can be stated that the developmental characteristics, cognitive structure, experiences, affective characteristics of the individual, comprehensibility of the reading material, suitability to the individual, reader-friendliness and the characteristics of the reading environment influence the comprehension.

When the literature is examined, it is seen that there are studies on scale development related to many affective factors influencing reading. It is known that individuals' attitudes towards reading affect their reading speed, reading motivation and their success in comprehension (Yıldız, 2013). In this respect, many different scale development studies have been conducted regarding reading attitudes in Turkey. There are reading attitude scales developed for primary school students (Başaran and Ateş, 2009; Güngör-Kılıç, 2004; Özbay and Uyar, 2009; Sallabaş, 2008; Ünal, 2006; Ürün-Karahan, 2018) secondary school students (Akkaya and Özdemir, 2013)) and pre-service teachers (Doğan and Çermik, 2016). In addition, there are many reading attitude scales adapted from abroad (Baştuğ and Keskin, 2013; Çakıroğlu and Palancı, 2015; Dedeoğlu and Ulusoy, 2013). As a result of increasing digitalization in daily life, reading and technology-related attitude studies have also been included in the literature (Güneş & Susar-Kırmızı, 2014). One of the other affective factors that affect individuals' reading and comprehension processes is reading motivation. It is known that there are scale development studies related to reading motivation in Turkey (Aydemir and Öztürk, 2013; Durmuş, 2014; Katrancı, 2015; Yıldız, 2010; Yıldız, Yıldırım, Ateş, and Çetinkaya, 2013) and abroad (Chapman and Tunmer, 1995; Gambrell, Palmer, Codling and Mazzoni, 1996; Wigfield and Guthrie, 1995). Similarly, reading anxiety scales were included in the literature (Melanlıoğlu, 2014; Çeliktürk & Yamaç, 2015). Another factor that is known to have an effect on reading comprehension is metacognitive awareness (Jacobs and Paris, 1987; Mokhtari and Reichard, 2002; Zhang and Wu, 2009). It was found that metacognitive reading skills also affect self-efficacy perceptions (Kuruyer and Özsoy, 2016). There are developed scales in our country in this field (Çakıroğlu and Ataman, 2008; Gelen, 2003; Karatay, 2009). When the affective characteristics affecting reading and comprehension are considered, it is noteworthy that predominantly, scales for determining attitudes were developed. Research shows that people with poor reading skills have turned into people with insufficient thinking skills who cannot use writing and thinking strategies well (Alfassi, 2004). From this point of view, the fact that having individuals with advanced reading comprehension skills in a society prepares the basis for that society to have a healthy thinking structure. Because individuals with advanced reading skills are individuals with a high level of thinking and understanding. At the same time, reading and comprehension skills directly affect the student's ability to develop her/his personality, to establish healthy relations with the society she/he lives in, and to be successful in life and in school (MEB, 2009). Reading skills are generally an important determinant of academic achievement (Bloom, 2012). Reading comprehension, which is an important factor for development in all academic processes, is affected by the self-efficacy perception of the individual in this area. In this context, there are different self-efficacy scales in the literature. There are many different studies on scale development regarding children's perception of reading self-efficacy (Henk and Melnick, 1995; Keskin and Atmaca, 2014; Ülper, Yaylı and Karakaya, 2013), reading self-efficacy in a foreign language (Ghonsooly and Elahi, 2010; Mills, Pajares and Herron, 2006) on screen reading self-efficacy as a result of digitalization (Gömlüksiz, Kan and Fidan, 2013), critical reading skill self-efficacy (Karabay, 2013; Karadeniz, 2014; Küçükoğlu, 2008); and parents' story reading self-efficacy (Kotaman, 2009). However, these scales focus on the concept of reading. In determining self-efficacy perceptions of reading comprehension, "Reading Comprehension Self-Efficacy Perception Scale" was developed by Epçaçan and Demirel (2011). However, the fact that this scale was arranged in a 5-point Likert type produced the opinion that it would not be appropriate for the level of the earlier age group students. Because it is thought that individuals of early age may have difficulty in filling five-point Likert scales (Köklü, 1995). Therefore, it is important to measure the level of self-efficacy perception of individuals. Thus, it can be ensured that the students who have insufficient

self-efficacy for reading comprehension can be determined and necessary precautions can be taken. Therefore, it is thought that the development of Self-efficacy Perception Scale for Read Comprehension, which is an important criterion for success, will contribute to the literature as well as contributing to the development of sufficient and successful individuals in reading comprehension.

Method

It is a scale development research designed in a survey model. The survey model is based on the description of an existing situation (Karasar, 2009). In this study, the psychometric feature that will be described according to the survey model is self-efficacy for reading comprehension. This study consists of the validity and reliability studies of the data collection tool developed to determine the self-efficacy perceptions of 4th grade students for reading comprehension.

Study Group

The sample of the study consisted of 525 primary school fourth grade students. The data obtained from 518 public school students were included in the analysis as data from 7 students were invalid and left out. In the scale development studies, it was reported that an average of about 300 samples were suitable for factor analysis (Comrey and Lee, 1992). In this context, it is seen that the data set obtained from 518 people is suitable for exploratory factor analysis.

Data Collection Tool

Data were obtained from 518 students for validity and reliability studies of Self-Efficacy Perception Scale for Reading Comprehension (SPSRC). While writing the items in the data collection tool, first of all, a theoretical framework was created by scanning the literature. In line with this theoretical framework, the general structure of the scale was determined by using the book section on the development of self-efficacy scales of Bandura (2005) and a pool of 32 items was formed. In order to determine the scope validity, expert opinion was consulted (Karasar, 2009). In order to ensure the validity of the scale, a test form was created in accordance with the opinions of the classroom teachers, psychological counseling and guidance, education programs and teaching field experts.

Based on the view that the use of triple likert-type scales will be appropriate for small-age participants (Köklü, 1995), the scale items were organized as follows; "Doesn't fit me", "Fits me a little", "Fits me completely". (Appendix 1).

The responses of the students to the scale were graded from 1 to 3 and transferred to the SPSS program. It was checked by KMO (Kasier - Meyer - Olkin) and Bartlett Sphericity Tests whether the responses to items were suitable for factor analysis (Kalaycı, 2010). In order to determine the factor structures of the SPSRC, the principal component analysis and varimax rotation component analysis were used. The factor structure of the scale was determined by Exploratory Factor Analysis (EFA). Then, the factor load values of each item in the scale were calculated. For the whole scale, reliability was determined by Cronbach-alpha internal consistency coefficient. Confirmatory factor analysis was conducted to confirm the single factor structure of the scale using Lisrel program. Cronbach-alpha internal consistency coefficient and Guttman Split-Half correlation were calculated for the whole scale and reliability was determined.

Findings

The Kaiser-Meyer-Olkin (KMO) value and Barlett test results were analyzed in order to test the suitability for the exploratory factor analysis (EFA) of the data set obtained from the SPSRC. These results are given in Table 1.

Table 1. KMO and Bartlett Sample Proficiency Test Results

Kaiser-Meyer-Olkin Sample Proficiency Measurement		.945
Bartlett Test Results	Approximate Chi-Square (x^2)	4524.156
	Degree of freedom (df)	435
	Significance level (Sig.)	.000

The KMO value in Table 1 is a ratio that measures the size of the correlation coefficients and the size of the partial correlation coefficients and measures the suitability of the data set for factor analysis. This ratio should be over 0.5. The values of 0.90 and above are interpreted as "excellent" for factor analysis (Kalaycı, 2010). The KMO ratio of SPSRC was 0.945, indicating that the number of samples for the data was excellent for factor analysis. Bartlett sphericity test results test the suitability of the data set for factor analysis by measuring whether there is a high correlation between the variables. When the results are examined, it is seen that the data set is suitable for factor analysis in the Bartlett test results ($p=0,000$, $p<0,05$) as well.

The principal component analysis was used for exploratory factor analysis to determine the construct validity of the scale. In order to determine how many factors the scale consists of, eigenvalue statistics of the items were determined and it was found that there were six factors in scale with eigenvalue statistics greater than 1. The number of factors related to SPSRC is given in Table 2 below.

Table 2. SPSRC Number of Factors Associated with Eigenvalue Statistics

Factor	Eigenvalues			Varimax Rotation - Total of Factor Loads Squares		
	Total	Explained Variance %	Cumulative Variance %	Total	Explained Variance %	Cumulative Variance %
1	9,109	30,363	30,363	3,083	10,278	10,278
2	1,360	4,532	34,895	2,580	8,602	18,879
3	1,165	3,882	38,777	2,492	8,308	27,187
4	1,097	3,658	42,435	2,335	7,785	34,972
5	1,017	3,390	45,835	2,224	7,414	42,386
6	1,002	3,339	49,164	2,033	6,778	49,164

When the total variances explained in Table 2 are examined, it is observed that there are 6 factors greater than 1 eigenvalue on the 30-item scale, but in the line chart of factor analysis which is another way in determining the number of factors that will be subject to rotation it is seen that the slope begins to disappear from factor 1 (Figure 1).



Figure 1. Line Chart of Factor Analysis for Eigenvalues

As seen in Figure 1, in line chart of factor analysis the slope starts to disappear from factor 1. Based on this graph, the scale was determined as one-dimensional.

In order for the scale to be one-dimensional; the ratio of the variance explained by the factor is at least 30% of the total variance and the eigenvalue of the first factor is greater than 3-3.5 times the eigenvalue of the second factor (Çokluk, Şekercioğlu and Büyüköztürk, 2012). In this case, when the SPSRC is examined; As a result of factor analysis, the ratio of variance explained by the first factor is over 30% of the total variance (the variance explained by the first factor was 30.36%, the variance explained by the second factor was 4.53% and the total variance was 34.89%) and provides the first condition. The eigenvalue of the first factor was found to be 9.109 and the eigenvalue of the second factor was 1.360. Thus, the second condition proving that the scale is a single factor is provided. Therefore, these results show that the scale has a single factor structure.

Factor load values for each item in the scale are given in Table 3 below.

Table 3. Factor Loads Related to SPSRC

Item No	Factor Load	Item No	Factor Load
13	.618	12	.535
14	.617	4	.533
17	.613	7	.530
25	.609	1	.529
29	.602	15	.528
22	.595	16	.527
21	.590	8	.518
27	.590	3	.517
26	.587	24	.513
19	.587	23	.512

9	.581	10	.511
20	.575	28	.505
2	.575	11	.502
18	.558	30	.456
5	.538	6	.414

When Table 3 is examined, it is seen that the factor load values of all items are above .30. For the number of data of 350 and above, the factor loads should be .30 and above (Kalaycı, 2010). Accordingly, it can be stated that the substances in the scale are suitable for use. It was decided to revise the item 24 from the scale as a result of the opinions obtained from the experts.

Confirmatory factor analysis (CFA) was performed with the data obtained from 350 students by using Lisrel 8.80 program to test the validity of the single factor structure of the scale. As a result of the CFA, it was seen that the factor loads (λ) of the items varied between .39- .60 (Figure 2). Standardized values of .30 and above indicate that they have an acceptable effect size (Kline, 2010). The t values of each item vary between 8.75 and 14.48. The fact that the calculated t-values are above 1.96 shows that the items in the scale represent the relevant dimensions in a meaningful way (Şimşek, 2007).

When the fit indices obtained from CFA were examined, it was concluded that p value was significant ($p < .05$). Therefore, the ratio χ^2/sd (799.91/377) was calculated to be 2,12. $\chi^2/df \leq 3$ is considered acceptable (Kline, 2010). Information on other fit indices is given in Table 5.

Table 4. Fit Indices for the Scale

Model	χ^2	χ^2/sd	NFI	NNFI	IFI	RFI	CFI	RMSEA
Single Factor Structure	799.91	2.12	.95	.97	.98	.95	.98	.04
Criteria		<3	$\geq 0,90$	$\geq 0,90$	$\geq 0,90$	$\geq 0,90$	$\geq 0,95$	$\leq 0,08$

When the fit indices of the scale were examined, it was concluded that the fit indices such as RMSEA, CFI, RFI, IFI, NNFI, NFI were in accordance with the criteria that the model in the literature was acceptable (Çokluk, Şekercioğlu & Büyüköztürk, 2014). In this case, the single factor structure of the SPSRC consisting of 29 items was confirmed as a model. The Cronbach-Alpha internal consistency coefficient of the scale, which consists of 29 items, was determined as .918. If the Cronbach-Alpha internal consistency coefficient is $0,80 \leq \alpha < 1,00$, the scale is a highly reliable scale (Kayış, 2010). Guttman Split-Half correlation method was also used to determine the reliability of the scale. Guttman Split-Half method is determined by calculating the correlation value between the two parts of the scale after dividing the form into two identical parts and applying the two parts to the participants simultaneously (Carmines and Zeller, 1982). In this calculation, the correlation between forms gives the reliability value of the scale. This correlation value of the scale was calculated as .828. According to reliability calculations, SPSRC is a high reliability scale.

Discussion and Conclusion

This study was carried out to develop the self-efficacy perceptions scale of 4th grade students for reading comprehension. There are 29 items in the SPSRC. Scale items are arranged in triple likert type; "Doesn't fit me", "Fits me a little", "Fits me Completely".

In the process of development of the scale, self-efficacy scale development studies in the literature were examined (Ekici, 2012; Epçaçan and Demirel, 2011; Karabay, 2013; Küçükoğlu, 2008; Ülper, Yaylı and Karakaya, 2013). Factor structures of these scales were reviewed and a common theoretical structure which could be adopted in determining the dimensions was sought. The scale aimed to determine the reading self-efficacy perception of elementary school 4th, 5th and 6th grade students (Henk and Melnick, 1995) consists of three dimensions; Observational Comparison, Social Feedback, Physiological States while the elementary school children's self-efficacy scale developed by Ülper, Yaylı and Karakaya (2013) consists of one dimension. In the scale developed for reading self-efficacy in a foreign language (Ghonsooly and Elahi, 2010), there are four dimensions: Students' Reading Efficacy, Students' Reading Disabilities, Practice and Skills, Enjoying Group Work. The scale developed to determine the pre-service teachers' critical reading self-efficacy perceptions (Karabay, 2013) consists of three dimensions: Evaluation, Research-Examination and Visual. Another critical reading self-efficacy scale (Karadeniz, 2014) consists of five dimensions: Questioning, Analysis, Evaluation, Finding Similarities and Differences, Making Inferences. The scale developed to determine the screen reading self-efficacy levels of pre-service teachers (Gömleksiz, Kan and Fidan, 2013) consists of three dimensions: Comprehension, Difficulty and Benefit. Reading comprehension self-efficacy scale (Epçaçan & Demirel, 2011) consists of three dimensions: Written and Visual Comprehension, Self-Regulation in Reading, and High Self-Confidence Related to Reading.

In this respect, it is seen that there is no fixed factor structure related to self-efficacy concept and it is concluded that there are scales in different factor structures according to the subject being studied and the characteristics of the sample. In this study, studying on self-efficacy perception for reading comprehension and studying with the 4th grade students are thought to be the factors in the emergence of the single factor structure of the scale.

As a result of this study, it was concluded that the SPSRC was able to measure the self-efficacy perceptions of the 4th grade students in reading comprehensive validly and reliably. This scale can be used to determine which variables affect the self-efficacy perceptions of primary school 4th grade students for reading comprehension. In this context, validity and reliability studies of the SPSRC can be tested in different working groups.

The developed SPSRC can be used by both teachers and researchers in this field to determine the self-efficacy perceptions of 4th grade students for reading comprehension.

Acknowledgments

This study was formed from Sultan Selen Kula's Phd dissertation under Prof. Dr. Yusuf Budak's supervision.

References

- Akkaya, N. ve Özdemir, S. (2013). Ortaöğretim öğrencilerinin okumaya yönelik tutumlarının incelenmesi (İzmir-Buca örneği) [The study on the validity and the reliability of the attitude towards reading scale for high school students]. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 2(1), 75-96.
- Alfassi, M. (2004). Reading to learn: Effects of combined strategy instruction on high school students. *The Journal of Educational Research*, 97(4), 171.
- Aydemir, Z. ve Öztürk, E. (2013). Metinlere yönelik okuma motivasyonu ölçeği: geçerlik ve güvenilirlik çalışması [Reading motivation scale for texts: A validity and reliability study]. *Elementary Online*, 12(1), 66-76.
- Balcı, A. (2013). *Okuma ve anlama eğitimi [Reading and comprehension education]*. Ankara: Pegem Akademi.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Bandura, A. (1994). Self-Efficacy. V. S. Ramachandian (Ed.). *Encyclopedia of Human Behaviour* içinde (s.71-81). 4th Press, Academic Press, New York.
- Bandura, A. (2005). Guide for constructing self-efficacy scales. F. Pajares & T. Urdan (Ed.). *Self-efficacy beliefs of adolescents* içinde (s. 307-337). Information Age.
- Başaran, M. ve Ateş, S. (2009). İlköğretim beşinci sınıf öğrencilerinin okumaya ilişkin tutumlarının incelenmesi [An investigation of fifth graders' attitudes towards reading]. *Gazi Eğitim Fakültesi Dergisi*, 29(1),73-92.
- Baştuğ, M. ve Keskin, H. K. (2013). Ergenlik dönemi okuma tutumu ölçeği'nin Türkçeye uyarlanması [The adaptation of survey of adolescent reading attitudes (sara)into Turkish]. *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic*, 8(4), 295-311.
- Bloom, B.S. (2012). *İnsan nitelikleri ve okulda öğrenme*, (D. Özçelik, Çev.). Ankara: Pegem Akademi.
- Bruning, R. H., Schraw, G. J., & Norby, M.M. (2014). *Bilişsel psikoloji ve öğretim [Cognitive psychology and teaching]*. (Z. N. Ersözlü ve R. Ülker, Çev. Ed.). Ankara: Nobel.
- Carmines, E. G. ve Zeller, R. A. (1982). *Reliability and Validity Assessment*. 5th printing. Beverly Hills: Sage Publications Inc.
- Chapman, J.W. ve Tunmer, W.E. (1995). Development of young children's reading self-concepts: An examination of emerging subcomponents and their relationship with reading achievement. *Journal of Educational Psychology*, 87(1), 154-167.
- Comrey, A. L. ve Lee, H. L. (1992). *A first course in factor analysis*. New Jersey: Erlbaum.
- Çakıroğlu, A. ve Ataman, A. (2008). Üstbilişsel strateji kullanımının okuduğunu anlama düzeyi düşük öğrencilerde erişim artırımına etkisi [The effect of metacognitive strategy training on improving the achievement level of students having low achievement levels of reading comprehension]. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, 16, 1-13.
- Çakıroğlu, O. ve Palancı, M. (2015). Okuma tutum ölçeği: geçerlik ve güvenilirlik çalışması [Reading attitude scale: The reliability and validity study]. *International Journal of Human Sciences*, 12(1), 1143-1156. <https://doi.org/10.14687/ijhs.v12i1.3248>
- Çeliktürk, Z. ve Yaman, A. (2015). İlkokul ve ortaokul öğrencileri için okuma kaygısı ölçeğinin geliştirilmesi: geçerlik ve güvenilirlik çalışması [Development of the reading anxiety scale for elementary and middle school students: validity and reliability study]. *Elementary Online*, 14(1), 97-107.
- Çokluk, Ö.; Şekercioğlu, G., & Büyüköztürk, Ş. (2014). *Sosyal bilimler için çok değişkenli istatistik spss ve lisrel uygulamaları*. Ankara: Pegem Akademi.

- Dedeođlu, H. ve Ulusoy, M. (2013). Sınıf öđretmeni adaylarının okuma tutumları [Classroom pre-service teachers' reading attitudes]. *Okuma Yazma Eđitimi Arařtırmaları*, 1 (2), 80-88.
- Dođan, B. ve ermik, H. (2016). Kitap okumaya ynelik tutum leđi: geerlik ve gvenirlik alıřması. *Education Sciences (NWSAES)*, 11(3): 168-183.
- Durmuř, G. (2014). Okuma motivasyonu leđi'nin Trkeye uyarlanması [The adaptation from English to Turkish of "Motivations for reading questionnaire (MRQ)]. *Uluslararası Eđitim Bilimleri Dergisi*, 1(1), 16-40.
- Ekici, G. (2012). Akademik z yeterlik leđi: Trkeye uyarlama, geerlik ve gvenirlik alıřması [Academic sel-efficacy scale: The study of adaptation to Turkish validity and reliability]. *Hacettepe niversitesi Eđitim Fakltesi Dergisi*, 43, 174-185.
- Epaan, C. ve Demirel, . (2011). Okuduđunu anlama z yeterlik algısı leđinin geerlik ve gvenirlik alıřması [Validity and reliability study on the scale of belief self-efficiency reading comprehension]. *Uluslararası Sosyal Arařtırmalar Dergisi*, 4(16), 120-128.
- Gambrell, L.B., Palmer, B.M., Codling, R.M. & Mazzoni, S.A. (1996). Assessing motivation to read. *The Reading Teacher*, 49(7), 2-19.
- Gelen, İ. (2003). *Biliřsel farkındalık stratejilerinin trke dersine iliřkin tutum, okuduđunu anlama ve kalıcılıđa etkisi*. Yayınlanmış Doktora Tezi, ukurova niversitesi Sosyal Bilimler Enstits. Adana.
- Ghonsooly, B. ve Elahi, M. (2010). Learners' self-efficacy in reading and its relation to foreign language reading anxiety and reading achievement. *Journal of English Language Teaching and Learning*, 53(217), 45-67.
- Gmleksiz, M. N., Kan, A.. ve Fidan, E. K. (2013). đretmen adaylarının ekran okuma zyeterlik dzeylerine iliřkin grřleri. *Erzincan niversitesi Eđitim Fakltesi Dergisi*, 15(2), 138-159.
- Gneř, F. (2009). *Hızlı okuma ve anlamı yapılandırma*. Ankara: Nobel.
- Gneř, F. ve Susar-Kırmızı, F. (2014). E-kitap okumaya ynelik tutum leđinin (ekot) geliřtirilmesi: geerlilik ve gvenirlik alıřması [Developing the scale of attitudes towards reading E-Books (SATRE): Validity and reliability study]. *Bartın niversitesi Eđitim Fakltesi Dergisi*, 3(2), 196 – 212.
- Gngr-Kılı, A. (2004). *İřbirlikli đrenme, okuduđunu anlama, strateji kullanımı ve tutum*. Yayınlanmamıř Doktora Tezi. Dokuz Eyll niversitesi, İzmir.
- Henk, W. A. ve Melnick, S. A. (1995). The Reader self-perception scale (RSPS): a new tool for measuring how children feel about themselves as readers. *The Reading Teacher*, 48(6), 470-482.
- Jacobs, J. E. ve Paris, S. G. (1987). Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational Psychologist*, 22(3-4), 225-278.
- Kalaycı, ř. (2010). Faktr analizi. ř. Kalaycı (Ed.). *SPSS uygulamaları ok deđiřkenli istatistik teknikleri* iinde (s. 321-331). Ankara: Asil.
- Karabay, A. (2013). Eleřtirel okuma z yeterlik algı leđinin geliřtirilmesi [The development of critical reading self-efficacy perception scale]. *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic*, 8(13), 1107-1122.
- Karadeniz, A. (2014). Eleřtirel okuma zyeterlilik algısı leđinin geerlilik ve gvenirlik alıřması [Critical reading self-efficacy perception scale validity and reliability study]. *Bartın niversitesi Eđitim Fakltesi Dergisi*, 3(1), 113 – 140.
- Karasar, N. (2009). *Bilimsel arařtırma yntemleri*. Ankara: Anı Yayıncılık.
- Karatay, H. (2009). *Okuma stratejileri biliřsel farkındalık leđi*. Abant İzzet Baysal niversitesi Sosyal Bilimler Enstits Dergisi, 2(19), 58-80.

- Katrançı, M. (2015). İlkokul dördüncü sınıf öğrencilerinin kitap okuma motivasyonlarının incelenmesi [Investigation of the book reading motivation of elementary school fourth graders]. *Ana Dili Eğitimi Dergisi*, 3(2), 49-62.
- Kayış, A. (2010). Güvenirlik analizi. Ş. Kalaycı (Ed.). *SPSS uygulamaları çok değişkenli istatistik teknikleri içinde* (s, 403-419). Ankara: Asil.
- Keskin, H. K. ve Atmaca, T. (2014). Okur öz algısı ölçeği-2'nin Türkçeye uyarlanması [The Adaptation of reader self-perception scale-2 into Turkish (RSPS-2)]. *Elementary Online*, 13(1), 306-318.
- Kline, R. B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford Press
- Kotaman, H. (2009). Ana-babaların hikâye kitabı okumaya ilişkin özyeterlilik ölçeği. *Türk Eğitim Bilimleri Dergisi*, 7(4), 767-780.
- Köklü, N. (1995). Tutumların ölçülmesi ve likert tipi ölçeklerde kullanılan seçenekler. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 28(2), 81-93.
- Kuruyer, H. G. ve Özsoy, G. (2016). İyi ve zayıf okuyucuların üstbilişsel okuma becerilerinin incelenmesi: bir durum çalışması [Investigation of metacognitive reading skills of good and poor readers: A case study]. *Kastamonu Eğitim Dergisi*, 24(2), 771-788.
- Küçüköğlü, H. (2008). *İngilizce öğretmen adaylarının eleştirel okumaya yönelik özyeterlilik algıları*. Yayınlanmamış Yüksek Lisans Tezi. Dicle Üniversitesi Sosyal Bilimler Enstitüsü, Diyarbakır.
- Melanlıoğlu, D. (2014). Okuma kaygısı ölçeğinin psikometrik özelliklerinin belirlenmesi [Determining the psychometric features of reading anxiety scale]. *Educational and Science*, 39(176), 95-105.
- Milli Eğitim Bakanlığı. (2009). *İlköğretim Türkçe dersi öğretim programı ve kılavuzu (1-5. sınıflar)*. Ankara: MEB.
- Mills, N., Pajares, F. ve Herron, C. (2016). A Reevaluation of the role of anxiety: self-efficacy , anxiety, and their relation to reading and listening proficiency. *Foreign Language Annals*, 39(2), 276-295.
- Mokhtari, K. ve Reichard, C. A. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94, 2, 249-259.
- Özbay, M. ve Uyar, Y. (2009). İlköğretim ikinci kademe öğrencileri için okumaya yönelik tutum ölçeğinin geliştirilmesi: Geçerlik ve güvenilirlik çalışması [The development of reading attitude scale for secondary level students: Study on the validity and reliability]. *E-Journal of New World Sciences Academy*, 4(2): 632-651.
- Sallabaş, M. E. (2008). İlköğretim 8. sınıf öğrencilerinin okumaya yönelik tutumları ve okuduğunu anlama becerileri arasındaki ilişki [Relationship between 8th grade secondary school students reading attitudes and reading comprehension skills]. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 9(16), 141-155.
- Senemoğlu, N. (2009). *Gelişim öğrenme ve öğretim: kuramdan uygulamaya*. Ankara: Pegem Akademi.
- Schunk, D. H. (1981). Modeling and attributional effects on children's achievement: a self-efficacy analysis. *Journal of Educational Psychology*, 73, 93-105.
- Schunk, D. H. (2011). *Learning theories an educational perspective*. (M. Şahin, Çev.Ed.). Ankara: Nobel.
- Şimşek, Ö. F. (2007). *Yapısal eşitlik modellemesine giriş*. Ankara: Ekinoks.
- Türk Dil Kurumu. (2005). *Türkçe sözlük*. 10. Baskı, Ankara.
- Ülper, H., Yaylı, D. ve Karakaya, İ. (2013). Okur özyeterlilik ölçeğinin geliştirilmesi [Developing the reader self-efficacy scale]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 14(1), 85-100.
- Ünal, E. (2006). *İlköğretim öğrencilerinin eleştirel okuma becerileri ile okuduğunu anlama ve okumaya ilişkin tutumları arasındaki ilişki*. Yayınlanmamış yüksek lisans tezi, Osmangazi Üniversitesi, Eskişehir.

- Ürün-Karahan, B. (2018). Okumaya yönelik tutum ölçeği: ölçek geliştirme çalışması [Reading attitude scale: A scale development study]. *Kastamonu Üniversitesi Kastamonu Eğitim Dergisi*, 26(1), 67-73.
- Viau, R. (2015). *Okulda Motivasyon*. (Y. Budak, Çev.), Ankara: Anı.
- Yıldırım, A., ve Şimşek, H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin.
- Yıldız, M. (2010). *İlköğretim 5. sınıf öğrencilerinin okuduğunu anlama, okuma motivasyonu ve okuma alışkanlığı arasındaki ilişki*. Yayınlanmamış doktora tezi, Gazi Üniversitesi, Ankara.
- Yıldız, M., Yıldırım, K, Ateş, S. ve Çetinkaya, Ç. (2013). Yetişkin okuma motivasyonu ölçeğinin Türkçe uyarlaması [Turkish adaptation of adult reading motivation inventory]. *Elektronik Sosyal Bilimler Dergisi*, 12(44), 348-359.
- Yıldız, M. (2013). İlköğretim 3, 4 ve 5. sınıf öğrencilerinin okuma motivasyonlarının incelenmesi [A study on the reading motivation of elementary 3rd, 4th, and 5th grade students]. *Education and Science*, 38 (168), 260-271.
- Wigfield, A. & Guthrie, J.T. (1995). *Dimensions of children's motivations for reading: an initial study* (Research Rep. No. 34). Athens, GA: National Reading Research Center.
- Zhang, L. J. ve Wu, A. (2009). Chinese senior high school EFL students' metacognitive awareness and reading-strategy use. *Reading in a Foreign Language*, 21, 1, 37-59.
- Zimmerman, B. J. (1995). Self-efficacy and educational development. A. Bandura (Ed.), *Self-efficacy in changing societies*, içinde (s. 202-231). New York, NY, US: Cambridge University Press.

Appendix 1. Okuduğunu Anlamaya İlişkin Öz Yeterlik Algısı Ölçeği

Maddeler	Bana Hiç Uymuyor	Bana Biraz Uyuyor	Bana Tamamen Uyuyor
1. Okuduğum metinde yer alan kelimelerin anlamını açıklayabilirim.			
2. Okuduğum metinde yer alan cümlelerin anlamını açıklayabilirim.			
3. Okuduğum metinde yer alan paragrafların anlamını açıklayabilirim.			
4. Okuduğum metnin ana fikrini belirleyebilirim.			
5. Okuduğum metnin konusunu belirleyebilirim.			
6. Okuduğum metinde yer alan bir deyim ne anlama geldiğini açıklayabilirim.			
7. Okuduğum metinde yer alan bir fikri eleştirebilirim.			
8. Okuduğum metinde yer alan bir düşünceyi kendi cümlelerimle yeniden ifade edebilirim.			
9. Okuduğum bir metni özetleyebilirim.			
10. Okuduğum bir metinle ilgili çıkarımlar yapabiliyim.			
11. Başlığını okuduğum bir metnin içeriğini tahmin edebilirim.			
12. Görsellerine baktığım bir metnin içeriğini tahmin edebilirim.			
13. Okuduğum metinde neden-sonuç ilişkileri kurabilirim.			
14. Okuduğum metnin anlamını açıklayabilirim.			
15. Okuduğum metinde geçen durumlarla ilgili karşılaştırmalar yapabiliyim.			
16. Okuduğum metinde yer alan düşünceleri yorumlayabilirim.			
17. Okumakta olduğum metnin sonucunu tahmin edebilirim.			
18. Okuduğum metinde yer alan olayların benzer yönlerini belirleyebilirim.			
19. Okuduğum metinde yer alan olayların farklı yönlerini belirleyebilirim.			
20. Okuduğum metinde geçen karakterlerin duygularını açıklayabilirim.			
21. Okuduğum metinde geçen olayları gözümde canlandırabilirim.			
22. Okuduğum metinde geçen karakterleri gözümde canlandırabilirim.			
23. Okuduğum metinde geçen yerleri (mekânları) gözümde canlandırabilirim.			
24. Okuduğum metinde geçen olayları olumlu ve olumsuz yönleriyle değerlendirebilirim.			
25. Okuduğum metinle ilgili kendi düşüncelerimi ifade edebilirim.			
26. Okuduğum metinle ilgili kendi duygularımı ifade edebilirim.			
27. Okuduğum metinde karşılaştığım yeni kelimelerin anlamlarını tahmin edebilirim.			
28. Okuduğum metinle ilgili sorulan soruları yanıtlayabilirim.			
29. Okuduğum metnin anlam akışını bozan ifadeleri belirleyebilirim.			