International Online Journal of Educational Sciences, 2013, 5 (2), 351-360

iojes
www.iojes.net

International Online Journal of Educational Sciences

ISSN: 1309-2707

The Psychometric Properties of the Writing Motivation Scale

Ergün Öztürk[1]

[1]*Sakarya University, Faculty of Education, Sakarya, Turkey*

ARTICLE INFO

Article History:
Received 29.04.2013
Received in revised form 10.06.2013
Accepted 20.06.2013
Available online 05.08.2013

ABSTRACT

Determining Student's negative attitudes to writing and increasing their writing performances are very important. This could be done by examination of factors that will affect writing motivation and performance. In this context, main purpose of this study is to develop a compatible and acceptable writing motivation scale that has sufficient sensitivity in evaluation of student writing structures. The sample of this study was composed of 395 fourth grade elementary school students. 52.7% percent of those surveyed were females (208), 47.3% percent (187) were males. In the process of scale development, initially writing was surveyed and a pool including 54 items was created. In validity study of the scale, for content validity experts' ideas were taken and for construct validity exploratory factor analysis was performed. Internal consistency coefficient was calculated for reliability. 5 factor structure consisting of 22 items acquired by exploratory factor analysis was tested by confirmatory factor analysis (EFA). When results were evaluated, a valid and reliable scale was developed consisted of 22 items and 5 factors which were 'positive attitude towards writing' 'possessed purpose' 'loading failure to writing' 'shared writing' and 'writing efforts.' 5 factors in scale only explain 54.27% percent of variance in total. Internal consistency coefficient in total was .81. These values show that the scale comprehensively explains Students' writing motivation at 4 grade level of elementary school.

© 2013 IOJES. All rights reserved

Keywords:
Writing motivation, validity, reliability, elementary students, senior students

Introduction

Elementary school-age children live in a social environment. They should experience communication process with society to live, satisfy their needs and improve themselves. This communication process is carried out by oral or writing. When writing skills of individuals develop, transferring of information, revising and organizing opinions are practiced in efficient way. This situation ensures higher level writings (Akyol, 2010). Writing is about getting down of organized information in brain to paper. In writing process, it is started with reviewing of information already organized in brain (Güneş, 2007). Writing is multi purposed tool that could be used for reaching aims (Graham, 2006). Writing is one of the inevitable ways to learn and it is not only cognitive but emotional activity, as well.

Preliminary writing studies of person complete phases until it reaches a certain level. These phases consist of complicated activities need for long apprenticeship process that includes scrawls of pre-schoolers, initially writing a word afterwards simple sentences in elementary school and writing essay in high school. Students improve so many series of contents and beliefs about role of writing and its functions (Bruning & Horn, 2000). Writing took its place in the whole school schedule that affect students' academic performance

[1] Corresponding author's address: Sakarya Üniversitesi, Eğitim Fakültesi, Sakarya, Turkey.
Telephone: +90 264 614 10 33-7152
Fax: +90 264 614 10 34
e-mail: eozturk@sakarya.edu.tr

Writing provides an environment for sustaining our personal connection with our family, friends and colleagues even if we're not together with them. People use writing for sharing information, transferring stories, struggle with loneliness, recording their experiences and creating imaginary world. In fact if a person writes about his/her emotions and experiences, it could be useful for him/her in psychologic and physiologic manners (Smyth, 1998).

Motivation playing important role in development and performance of writing is accepted the most contemporary model of writing (Hayes, 1996; Zimmerman & Risemberg, 1997). Schunk, Pintrich ve Meece (2008) described motivation as the way to stimulate and sustain activities that are purpose-oriented. Pintrich (2003) described motivation as "it is a concept that explains continuity in behaviour, situations and efforts to achieve a goal''.

Frequently, writers have difficulty in organizing their works. Because they undertake so many low and upper level psycholinguistics processes when they have strong motivation (Pajares&Valiante, 2001). As in other learning's, motivation effects development of writing (Graham, 2006). Importance of motivation especially comes up in starting to writing and be enthusiastic about completing it. Here we could not address motivation as one factor. Factors which are associated to it and affect motivation are also highly essential.

Motivation consists of so many related components such as self-sufficiency confidence, interest, perceived mission value, goal-oriented, loading for more success and failure (Troia, Harbaugh, Shankland, Wolbers & Lawrence 2013). Creating factors that increase motivation with those components will ensure students' interests for writing and sustainability in writing.

Noels (2001) indicated that three psychologic needs should be provided for increasing motivation. These are; 1. Overcome difficulties and feel the strength of success through research 2. Self-governance 3. Relationship – to be respected by the others in having biggest social whole and being member of this whole. Dutta Roy (2010) describes writing motivation as the whole of processes that will stimulate person to express his/her thoughts in writing.

In motivation studies, generally individual's intrinsic and extrinsic motivations were examined. Intrinsic motivation due to its characteristic reflects accomplishing an attitude for interesting or funny activities. Actually individuals who deal with an activity mostly want to continue on positive and emotional experiences and desire sustainability in these activities. Extrinsic motivation is the individual's activity resulting from the reasons other than internal interest or external reasons like reward, individuality, etc. Extrinsic motivation is not a single structure, but there is no continuity in qualification of extrinsic motivation (Brouwer, 2012). At this point it is understood that students' intrinsic motivation should be higher than extrinsic motivation when students are busy with writing.

Previous studies indicate that teachers mostly complain about the lack of writing motivation. Main resource of lack of motivation of students is to be perceived of writing as extracurricular, unrelated with individual experiences, difficult and boring by them (Hidi & Boscolo, 2006).

The lack of writing motivation could be conceptualized as a result of attitudes and beliefs which were developed throughout the school years depending on repeated writing experience. Studies about improvement of literacy showed that children have already dealt with different kinds of traditional writing before they start school. A child who has discovered writing as a way of communication and expression unfortunately will lose his/her attention because of many reasons. Students explain loss of writing motivation in many ways. Firstly, it is connected to strict teaching way of teachers stressing on traditional writing and suitability to text. Secondly it is related with frequent home works about writing as irrelevant to class activities. As a third, in general they see writing activities as boring. Students want to make narration, description, to express their thoughts and persuade. But this is not always an entertaining work. Especially when there isn't any audience except for teacher writing turns routine practice. Main resource of lack of motivation in students is to be perceived of writing as extracurricular, unrelated with individual experiences, difficult and boring by them (Boscolo & Boscolo, 2007). Traditional programmes have role in lack of motivation in writing studies at school. Time not only should be spared for contribution of defined fields at class level in programme but also time should be spared for other school subjects, as well. When

child start to school he/she is naturally motivated. But because of increase in complexity in writing with the school level, unsuccessful writing experiences can turn to willingness via extrinsic motivation.

Students' writing competences are closely related with self-perceptions in motivation for writing. With the professional point of view, competence self-perception is closely related with Students' qualification of arranging themselves as far as their personally participation in writing. These aspects are two types. The first one, if student doesn't have self-sufficiency he/she may not get involved in writing. In the same way, competence feeling about writing let students be volunteer about it. Briefly, motivated student could be described as a student who is willing to writing as a way of communication and expression or useful activity. Motivated students have realistic self-confidence about successful writing skills (Boscolo&Gelati, 2007).

Researches indicate that students' motivation in academic task performance decrease as age goes by. In writing field Pajaresand Valiante (1999) found that self-confidence level of students on 6th grade is higher than 7th and 8th grade students'. Even though 8th grade students are good writers according to teacher's evaluations, it is found that they are not better than 6th and 7th grade level students.

Writing motivation of a person could be more or less than reading or speaking motivation of person. These directions of gap and differences could be possible to change by different performance programmes. It is proved that positive motivation is directly related to appropriate behaviour (Kuhl, 1985; Kurtz & Borkowski, 1984), continuity in mission (Zimmerman & Ringle, 1981) and academic success (Kuhl, 1985; Kurtz & Borkowski, 1984; Paris & Winograd, 1990).

Bruning and Horn (2000) suggested four highly important situations to develop student's motivation in writing. These are functional beliefs about writings, supporting students' efforts via authentic writing, providing areas that will support writing and creating positive emotional environment.

So many teachers think that allowing students to choose their topics or giving interesting topics to write are useful way of increasing their writing motivation. An interesting topic is good starting point for writing but only when students recognize it, they get motivated.

It is important to involve in writing process actively and use writing efficiently as learning tool. Different studies exist about writing motivation in abroad (Boscolo&Gelati, 2007;Pajares, 2010; Zimmerman&Risemberg, 1997; Pajares&Valiante, 2001; Brouwer, 2012; Troıa,Shankland&Wolbers, 2012; Dutta,2010; Troia, Harbaugh, Shankland, Wolbers&Lawrence 2013). In most of studies about writing motivation, it is focused on limits of success motivation. Also many studies have been exercised with small groups (N<100) Potential differences between male and female in writing motivation have not been examined with all aspects (Troia, Harbaugh, Shankland, Wolbers& Lawrence 2013).

Although some studies are found in abroad, studies about elementary students' writing motivation and evaluation tools that define their writing motivation do not exist. Determination of negative approach of students towards writing and enhancing writing motivation are rather important. This could be provided by analysing factors that will affect writing motivation and performance. In this context, main purpose of this study is the need to develop a writing motivation scale that has enough compatible and acceptable specificity for evaluation of student's writing motivation structures.

Method

Participants

The research is a study of developing a scale. Validity and reliability studies were applied to 395 students at 4th grade level of elementary schools located in center of Sakarya. Validity and reliability studies were performed with data obtained from 395 students. 52.7% percent of those surveyed (208 people) were female, 47.3% percent (187 people) were male

Studies about Scale Development Process

Studies about scale development were examined (Boscolo&Gelati, 2007; Pajares, 2010; Zimmerman&Risemberg, 1997; Pajares&Valiante, 2001; Brouwer, 2012; Troıa,Shankland&Wolbers, 2012;Dutta, 2010; Troia, Harbaugh, Shankland, Wolbers&Lawrence 2013). Acquired items in scales and terminology were translated to Turkish by receiving opinion of foreign language experts. Afterwards an item pool of 54 items was created. In validity studies firstly experts who will apply for content and appearance validity were decided. These items were pre-screened and decreased into 44 items by taking opinions of two experts. Expert feedback form, teacher feedback form and student feedback form of scale were prepared. Expert feedback form was proposed to 10 experts including 4 Education Sciences lecturers, 4 Elementary School Department lecturers, 1 Computer and Educational Technologies Department lecturer and 1 Turkish Education department lecturer. Teacher feedback form was presented to 20 elementary grade teachers and student feedback form was delivered to 32 students.

According to results of negotiations, suggestions and corrections adds and drops were applied to the scale and it was became to 41 items scale including 6 negative and 35 positive items. In scoring system, scoring is gradated as 5 is for the expression of " it is very suitable for me", 4 means "it is suitable for me'', 3 means "I am uncertain'', 2 means "it is not suitable for me'', 1 means "it is not very suitable for me'' , total scores were calculated by implementing reverse for items in negative question.

Results

In this study explanatory factor analysis on scores taken by scale for construct validity of scale and determination of internal consistency coefficient were implemented respectively. Exploratory factor analysis was used to analyse accordance of scale structure with data.

Exploratory Factor Analysis

Exploratory factor analysis was done to data taken by scale for construct validity. In exploratory factor analysis it was paid attention to give 1 to eigenvalue of items and at least .30 to load values of items, items' taking part in one factor and being at least .10 variance between factors by determining items that are included to scale (Büyüköztürk, 2007). In addition, during construct validity varimax rotation was done.

In order to perform this analysis, firstly Kaiser- Meyer-Olkin (KMO) testing sufficiency of sample was evaluated. As a result of first factor analysis, KMO value was found as .907. Afterwards Bartlett Sphericity was checked (χ2 = 5428,729, p.=.000) and it was determined to make factor analysis because data showed significant difference. As a result of first factor analysis, 4, 17, 25. items were removed from scale for uploaded on more than one factor. In consequence of second factor analysis, KMO value was found as .904 and Bartlett'inSphericity test was checked (χ2 = 5022,299, p.=.000) acquired values showed significant difference and results of analysis 2, 5, 11, 35, 37, 40, 41. Items were removed from scale because of overloading items to many factors. The third factor analysis was done, KMO value .907 Bartlett'inSphericity test was checked (χ2 = 3877,268, p.=.000), as a result of analysis 10, 23, 30, 31ve 39. items were removed from scale because of their collecting more than one factor. As a result of analysis KMO value was found as .900 and (χ2 = 2870,022, p.=.000) acquired data showed significant differentness and when factor analysis was done 24, 29. Items loading more than one factor were removed from scale. In consequence of 5th factor analysis, KMO value was found as .899. According to Büyüköztürk (2007) for the reason of this value's being greater than 70 it was concluded that factor analysis could be done on these data. Secondly, by looking at Bartlett's Sphericity test (χ2 = 2724,641, p.=.000) it was realized that acquired values were suitable to make factor analysis because they showed significant difference (Büyüköztürk, 2007). In factor analysis varimax return axis was carried out as being 1 of eigenvalue of 22 items by giving priority to principal components analysis. As a consequence of validity works, it was found that scale has a five factor structure.

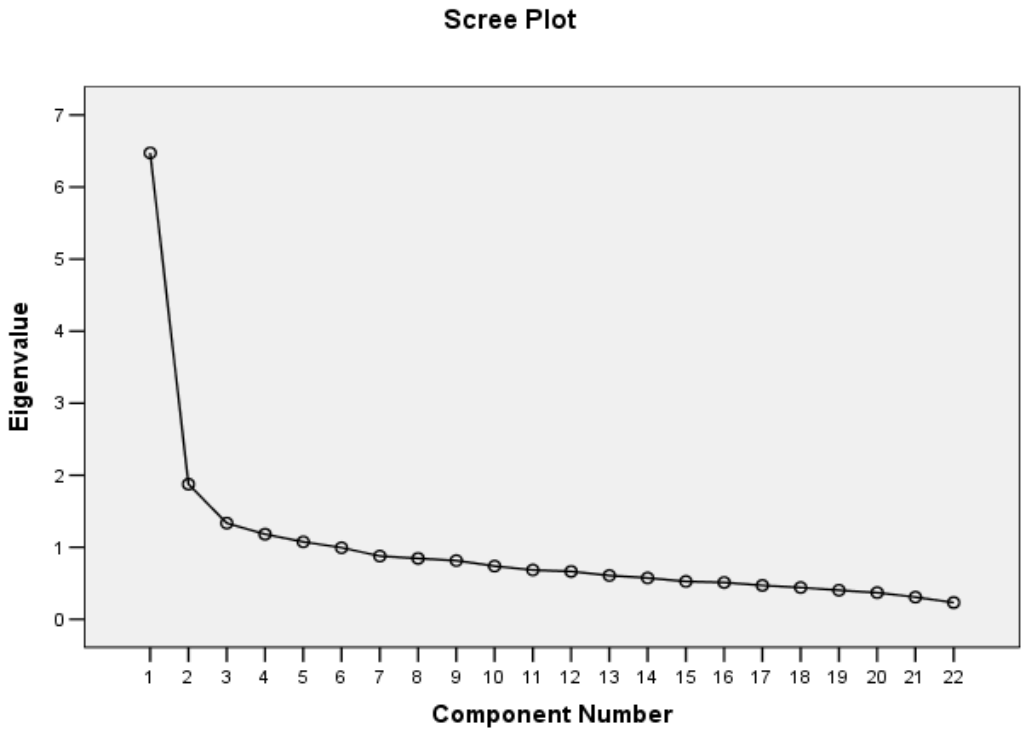


Figure 1. Scree-plot Graph Factor Structure Form

As a consequence of factor analysis that has 1 eigenvalue factor number in scale was 5 as seen in Scree-plot Graph. When plot graph was examined, 5 related factors structure was preferred because they did not have close values to each other

Table 1. Reading Motivation Scale Exploratory Factor Analysis Results

Common Factor Item	Variance	Load factor values				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
m1	.66	.64				
m3	.37		.42			
m6	.37			.57		
m7	.51		.62			
m8	.47		.55			
m9	.45	.53				
m12	.68	.74				
m13	.52					.57
m14	.59	.75				
m15	.47					.43
m16	.69	.73				
m18	.59	.74				
m19	.63					.75
m20	.56	.67				
m21	.52		.68			
m22	.48	.64				
m26	.59				.70	
m28	.64	.76				
m32	.61			.78		
m34	.46				.50	
m36	.50			.64		
m38	.58				.71	
Eigen values (Total.= 11.94)		6.48	1.87	1.33	1.18	1.08
Variance Explained % Total =	54.27	29.42	8.52	6.07	5.37	4.89

When table 1 is examined; writing motivation scale consists of five factors structure. In the first factor, there are 9 items including 1.,9., 12., 14., 16., 18., 20., 22. and 28. items. One of the items "writing is funny'' this is sample item of factor.

Among these factors, load point in the first factor changes between 0.53-0.76. This factor that explains 29.42% percent of total scale variance is entitled as "*positive attitude towards writing''.*

The second factor of scale consists of four items in total as 3., 7., 8. and 21. items. One of these items "I learn something while I am writing'' is sample factor of scale. Load value in the second factor of these items changes between 0.42-0.68. This factor that explains l8.52% percent of total variance is entitled as *"possessed objective*".

The third factor in scale consists of three items as 6., 32. and 36. Items. One of these items "I need assistance while I am writing'' is sample item of this factor . Load value in the third factor of these items changes between 0.42-0.68. This factor that explains 6.07% percent of total variance is entitled as *"loading failure to writing*".

The fourth factor of scale consists of three items in total as 26., 34. and 38. items One of these items " *I write only to show how well I write''* is sample item of this factor. Load value in the fourth factor of these items changes between 0.50-0.71. This factor that explains 5.37% percent of total variance is entitled as *"sharing of writing*".

The fifth factor of scale consists of three items in total as 13., 15. and 19. items. One of these items *"I can write so interesting things''* is sample item of this factor.. Load value in the fifth factor of these items changes between 0.43-0.75 this factor that explains 4.89% percent of total variance is entitled as *"effort to writing*".

When the whole scale including 22 items in total is deal with, scale shows five factors structure. Load value in factors of 22 items in scale changes between 0.42-0.78. Five factors in scale explain 54.2% percent of total variance. These values shows that this scale explains very well elementary school of 4 grade students' writing motivation.

Confirmatory Factor Analysis

5 factors' structure consisting of 22 items acquired by exploratory factor analysis was tested via exploratory factor analysis CFA. It was carried out by the first and the second system analysis. In the first system EFA analysis 22 items and 5 factor composed by these items were analysed. As a result of CFA analysis, fit indices were found as $\chi 2$= 495.24 (sd=199, p.= .00), $\chi 2$ / sd= 2.49 SRMR= 0.054, RMSEA= 0.061, GFI= 0.90, AGFI= 0.87, CFI= 0.96, NFI=0.93 and NNFI= 0.95. It was decided to make modification between M9 and 18. items and M12 and 16. items according to first system CFA modification suggestions. It was seen that implemented modification contributed to $\chi 2$ (chi-square). As result of implemented modification, coherence index was found as $\chi 2$= 440.32 (sd=198, p.= .00), $\chi 2$ / sd= 2.22 SRMR= 0.053, RMSEA= 0.056, GFI= 0.91, AGFI= 0.88, CFI= 0.97, NFI=0.94 and NNFI= 0.96. As a result of first level EFA it was seen that nine items in the first factor have standard solution between .52 and .79. Standard solutions of four items in the second factor change between .46 and .62. It was found that three items in the third factors change between .48 and .70; three items in the fourth factor change .36 and .65; and three items in the fifth factor changes between .39 and .83. It was decided how items are important for items in the whole factors. After standard solutions t values were checked between factors and items. Lack of red arrow with t values shows that all items are meaningful at .05 levels Exploratory Factor Analysis result including T values is in figure 2.

These values were found for level that would represent good coherence for first level CFA, then passed to the second level CFA operations. Writing motivation which is the implicit variable in second level CFA was included to analysis in the manner of being correlated with five factors. As a result of operated second level CFA, when it was looked whether identified factors explained implicit variable of writing motivation in a meaningful way or not, it was understood that all factors explained implicit variable of writing motivation in a meaningful way. When standard solution in latent variable of factors is checked in the result of second level CFA it is seen that it changes between .32 and .92. Importance of factors in latent variable came out. After standard solutions t value between factors and items was looked at. Lack of red arrow

related Joreskog ve Sorbom (1996) t values shows that all items and factors are meaningful at level of .05 factors. It was understood that t values in latent variable of factors changed between 2.83-13.93 and it was meaningful at .01 level due to higher than 2.76. As a result of performed analysis, coherence indexes were found as $\chi 2$= 453.61 (sd=202, p= .0000), $\chi 2$ / sd= 2.25, SRMR= 0.054, RMSEA= 0.056, GFI= 0.91, AGFI= 0.88, CFI=0.97, NFI=0.94 ve NNFI= 0.96. Streak (2007) $\chi 2$/sd value of 5 or less; RMSEA value of .08 or less and SRMR value of .10 or less indicate that they are needed for good coherence. Again IFI, CFI, NFI and NNFI of over .90 indicate a good model. On the other hand, being AGFI .80 or over; GFI .85 or over indicate good coherence. It could be said that all values have good coherence when they are evaluated by this aspect. On the basis of this indication it could be expressed that scale provides construct validity.

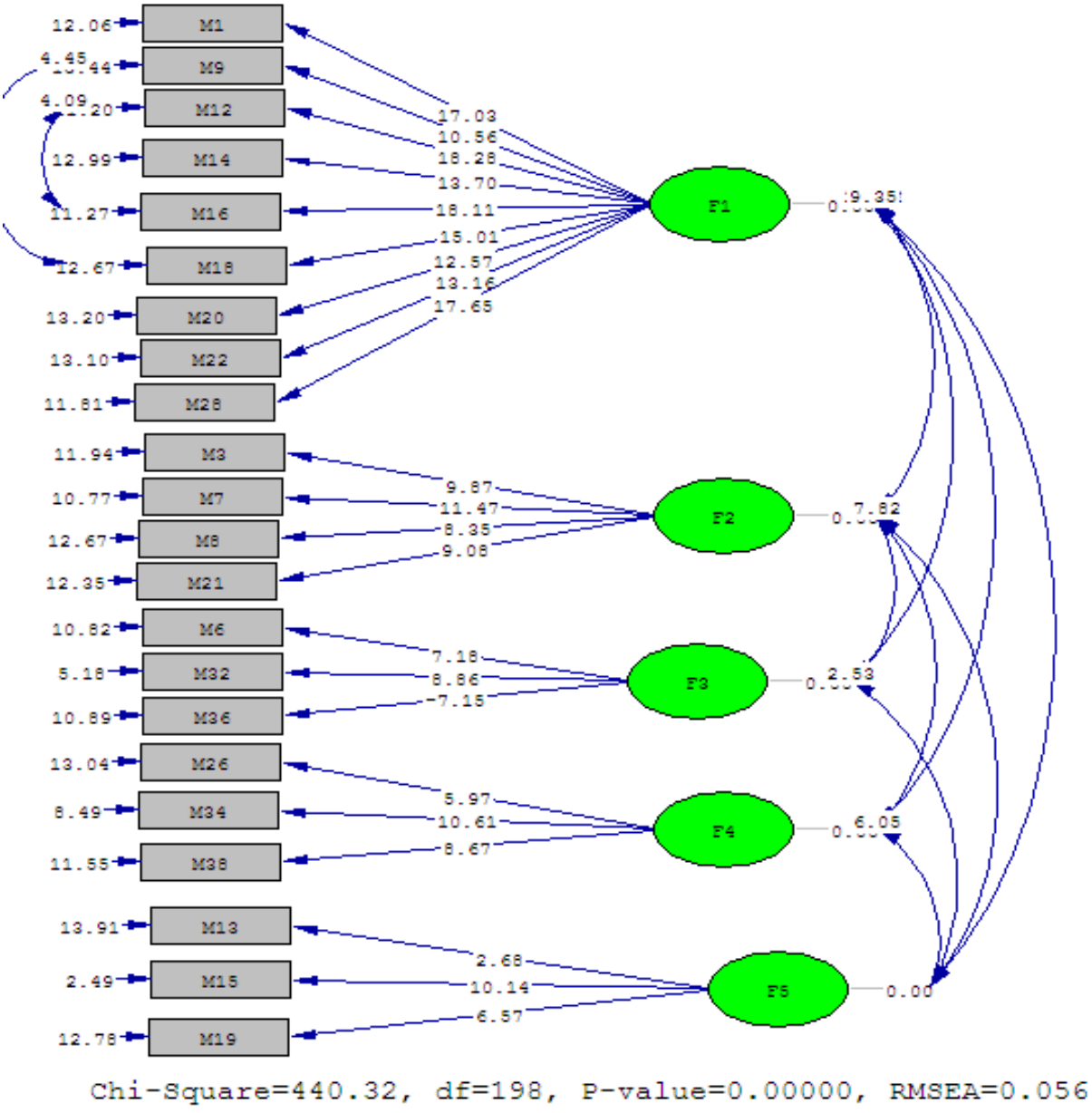


Figure 2. The First level t Values Exploratory Factor Analysis

Internal Consistency Coefficients for Writing Motivation Scale

Internal Coefficient of Consistence was calculated for reliability study of writing motivation scale. For consistency of latent variable in model of scale Cronbach alpha values were checked respectively. For the whole of scale, Cronbach alpha value was found as .81. Internal coefficient of consistence concerning sub-dimension is as below; .79 for "*a positive attitude towards writing*" sub factor; .80 for *''possessed objective''* sub

factor; .82 for *"loading failure to writing"* sub-factor; .81 for "*sharing of writing*" sub factor; .82 for *"efforts to writing*" sub-factor were found. This founded value is seen as acceptable value for level of writing motivation scale.

Discussion and Conclusion

In this study, main purpose is the need to develop a writing motivation scale that has enough compatible and acceptable specificity for evaluation of student's writing motivation structures. Researches indicate that students' motivations in academic mission performance are decreasing as age passed by. As pre writing ability is serving as being an indicator of writing performance, it is a dependent variable in many writing motivation study. According to Bandura (1997) pre-success in writing could be achieved when existing writing performance is used as predictive and by measuring pre-writing performance. This is essential for analysing factors that will affect writing motivation and performance. A child has already been motivated organically when he/she starts the school. But because of the increase in complexity between school level and writing, unsuccessful writing experiences can turn to willingness towards writing by means of extrinsic motivation.

Students are getting more motivated when writing is used as a tool for intellectual and social improvement (Cleary, 1991; Potter, McCormick &Busching, 2001). Students in elementary school usually want to share their writings with classmates, teachers, small group of students or the whole of the class. It is so important to control students' writing process to benefit from this interaction and sharing to maintain the control of writing process and to obtain motivational implementation.

Firstly exploratory factor analysis was applied to data acquired from scale for construct validity. In exploratory factor analysis it was paid attention to give 1 to eigenvalue of items and at least .30 to load values of items, items' taking part in one factor and being at least .10 variance between factors by determining items that are included to scale. Respectively in this study by making exploratory factor analysis for construct validity, a scale including 5 factors and 22 items that KMO value .899; and aimed Bartlett Sphericity test ($\chi 2$ = 2724,641, p.=.000) level was created. In reliability studies total internal coefficient of consistence was found as .81

After applying exploratory factor analysis the scale was found to have 5 factor construct. As a result of analysis, it was indicated that total eigenvalue of scale is 11.94, explained variance is 54.2% and factor load value of items change between .42 and .78. The five factors construct of our scale shows similarity with the studies of Troia, Harbaugh, Shankland, Wolbers ve Lawrence (2013) who developed a scale for defining student's writing motivation, their study to signify relations among students' writing motivation, writing activities and writing performance, and also the study of Dutta (2010) in which factors came out in studies of construct validity of motivation questions.

5 factors construct composed of 22 items was tested via exploratory factor analysis (EFA). It was carried out by means of EFA first and second system analysis. In the first system analysis 22 items and 5 factors composed by these items were analysed. As a result of second level EFA, when it was looked whether identified factors explained implicit variable of writing motivation in a meaningful way or not, it was understood that all factors explained implicit variable of writing motivation in a meaningful way.

When standard solution in latent variable of factors is checked in the result of second level EFA it is seen that it changes between .32 and .92. It was understood that t values in latent variable of factors changed between 2.83-13.93 and it was meaningful at .01 levels due to higher than 2.76. As a result of performed analysis, coherence indexes were found as $\chi 2$= 453.61 (sd=202, p= .0000), $\chi 2$ / sd= 2.25, SRMR= 0.054, RMSEA= 0.056, GFI= 0.91, AGFI= 0.88, CFI=0.97, NFI=0.94 and NNFI= 0.96

Consequently; a valid and reliable scale that can be used for determining writing motivation of elementary school students towards writing was developed. This scale can be used to determine the writing motivation of students. In further researches, how writing motivation scale will show difference in different age groups, texts or different field could be discussed.

References

Akyol, H. (2010). *Türkçe Öğretim Yöntemleri. Pegem Akademi*. Ankara.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Henry Holt & Co.

Boscolo, P., & Carotti, L. (2003). Does writing contribute to improving high school students' approach to literature? L1 – *Educational Studies in Language and Literature*, *3*, 197–224.

Boscolo, P., & Gelati, C. (2007). Best *practices in promoting motivation for writing*. In S. Graham, C. A. MacArthur, & J. Fitzgerald (Eds.), Best practices in writing instruction (pp. 202–221). New York, NY: Guilford.

Brouwer, K. L (2012). Writing motivation of students with language impairments. *Child Language Teaching and Therapy*, *28*(2) 189–210.

Bruning, R., & Horn, C. (2000). Developing motivation to write. *Educational Psychologist*, *35*, 25– 37.

Büyüköztürk, Ş. (2007). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem A Yayıncılık.

Cleary, L.M. (1991). Affect and cognition in the writing processes of eleventh graders. *Written Communication*, *8*(4), 473-507.

Dutta Roy, D. (2010). Construct validity of writing motivation Questionnaire. *International Journal of Psychological Research*, *3*(2), 6-11.

Graham, S. (2006). Writing. In P. Alexander & P. Winne (Eds.), *Handbook of educational psychology* (pp. 457–478). Mahwah, NJ: Erlbaum.

Güneş, F. (2007). *Türkçe öğretimi ve zihinsel yapılandırma*. Nobel Yayınları. Ankara.

Hayes, J. (1996). A *new framework for understanding cognition and affect in writing*. In M. Levy& S. Ransdell (Eds.), The science of writing: Theories, methods, individual differences, and applications (pp. 1–28). Mahwah, NJ: Erbaum.

Hidi, S., & Boscolo, P. (2006). *Motivation and writing*. In C. A. MacArthur, S. Graham& J. Fitzgerald (Eds.), Handbook of writing research (pp. 144–157). New York, NY: Guilford.

Kuhl, J. (1985). *Volitional mediators of cognition-behaviour consistency: Self regulatory processes and action versus stateori entation*. In J. Kuhl& J. Beckmann (Eds.), Action control: From cognition to behaviour (pp. 101–128). New York, NY: Springer-Verlag.

Kurtz, B. E., & Borkowski, R. G. (1984). Children's metacognition: Exploring relations among knowledge, process, and motivational variables. *Journal of Experimental Child Psychology*, *37*, 335–354.

Jöreskog, K., & Sörbom, D. (1996). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Chicago: Scientific Software International/Erlbaum.

Lipstein, R. L., & Renninger, K. A. (2007). ''Putting things into words'': The development of 12- to 15-year-old students' interest for writing. In S. Hidi& P. Boscolo (Eds.), *Writing and motivation* (pp. 113–140). Amsterdam, The Netherlands: Elsevier.

McLeod, S. (1987). Some thoughts about feelings: The affective domain and the writing process. *College Composition and Communication*, *38*(4), 426-435.

Noels, K. (2001). New orientations in language learning motivation. In Z. Dornyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 43–68). Honolulu: Second Language Teaching and Curriculum Center, University of Hawaii at Manoa.

Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading &Writing Quarterly*, *19*, 139-158.

Pajares, F., & Valiante, G. (1999). Grade level and gender differences in the writing self-beliefs of middle school students. *Contemporary Educational Psychology, 24*, 390–405.

Pajares, F., & Valiante, G. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology, 26*, 366–381.

Paris, S. G., & Winograd, P. (1990). How metacognition can promote academic learning and instruction. In B. F. Jones& L. Idol (Eds.), *Dimensions of thinking and cognitive instruction* (pp. 15–51). Hillsdale, NJ: Erlbaum.

Pintrich, P.R. (2003). A Motivational Science Perspective on the Role of Student Motivation in Learning and Teaching Contexts. *Journal of Educational Psychology*, *95* (4), 667–686.

Potter, E., McCormick, C., & Busching, B. (2001). Academic and life goals: Insights from adolescent writers. *High School Journal*, *85*(1), 45-55.

Schunk DH, Pintrich PR, & Meece JL (2008). *Motivation in education*: Theory, research, and applications. 3rd edition. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Smyth, J. (1998). Written emotional expression: Effectsizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, *66*, 174–184.

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

Tolchinsky, L. (2006). *The emergence of writing*. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), Handbook of writing research (pp. 83–95). NY: Guilford.

Troıa, A. G.; Shankland, K.R., & Wolbers, A.K. (2012). Motivation research in writing: Theoretical and empirical considerations. *Reading &Writing Quarterly*, *28*, 5–28.

Troia, GA., Harbaugh, AG., Shankland, RK., Wolbers, KA., Lawrence, A.M.(2013). Relationships between writing motivation, writing activity, and writing performance: effects of grade, sex, and ability. *Reading and Writing, 26*, 17-44.

Zimmerman, B. J., & Ringle, J. (1981). Effects of model persistence and statements of confidence on children's self-efficacy and problem solving. *Journal of Educational Psychology*, *73*, 485–493.

Zımmerman, B., & Rısemberg, R. (1997). Becoming a proficient writer: A self-regulatory perspective. *Contemporary Educational Psychology*, *22*, 73–101.