Influence of Cooperative Learning Model, Conventional and Motivation Study Of Student Results

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ABSTRACT

The purpose of this research is to know and test the Effect of Using Cooperative Learning Model, Conventional Learning Model and Learning Motivation to Learning Outcomes

Data collection using questionnaires and test methods. Questionnaires are used to determine student learning motivation, while testing methods are used to determine learning outcomes. While the data analysis is a two-way variance analysis.

Based on the calculation, cooperative learning can be an alternative innovative learning model used by teachers to improve student learning outcomes.
Keywords: cooperative learning, conventional, learning outcomes

Introduction

Related to teaching and learning in schools, the majority of teachers have been using a variety of innovative learning model that is oriented to students, such as discussions, demonstrations, Cooperative. but there are also some teachers still use conventional learning models, making it attractive for researchers to conduct research with regard to the learning outcomes on student-oriented learning (cooperative) learning model is oriented mainly to teachers (conventional).

Achievement motivation is considered as one of the determinants of student achievement and academic success (Anderman & Anderman, 2013). Studies in public schools show that AM predicts students' choice of duties and activities, persistence in performance situations, and attitudes toward the subject to a high level (Wigfield & Cambria, 2010). People who have successful motivation (people with higher HS levels) want to improve themselves ability, acquire new skills, and improve their skills in the task. They attribute success to insufficient effort and talent and business failure (Weiner, 1974). Even in failure, their personal skills are never questioned. Success triggers the excitement and pride of achievement and recognition of their own abilities. People who have successful motivation do not let their reviews and feelings of pride in success outweigh the feeling of shame for failure. Effects in the form of self-assessment emotions enhance motivational performance behavior (Heckhausen & Heckhausen, 2010). However, the whole directive is reinforced, not just one individual element. Only positive affirmation explains why this directive is relatively constant despite

The main purpose of today's education system is to train students who could keep up with the promptly changing conditions of the world, who are capable of thinking Independently, who have a developed sense of responsibility and have the ability to use the acquired skills and knowledge throughout Reviews their life (Doymuş, Simsek and Simsek¸ 2005). a. The most important advantages of cooperative learning models, the which has its basic philosophy as learning together, are that the students, while performing the instructional tasks, benefit from helping each other to learn along with the Uppermost advantage from the positive effects of social interaction (Güvenç and Acikgoz, 2007) and development of collaboration, problem- solving and social skills (Doymuş, Simsek and Bayrakçeken, 2004). Some characteristics of learning cooperative is; (A) each member has a role, (b) there is connection direct interaction between students, (c) each member of the group responsible for learning and also friends group of their, (d) the teacher helps develop interpersonal skills group, (e) interacting with a group of teachers only when needed (Carin, 1993).

The purpose of cooperative learning is different from the traditional groups that implement the competition system, in which individual success oriented to the failure of others. While the goal of cooperative learning is creating a situation where individual success is determined or influenced by the success of the group Slavin, R.E. (1995).

A typical classroom learning environment is characterized by an active interaction between the learner and the instructor or between learners and other learners. Unlike the distance learning environments and normal classes, Physical Education offers many opportunities for the first intensive social interaction to be organized (Hascher, 2004; Telama & Polvi, 2007). Therefore, studying in PE classes is always about controlling this social interaction and involving emotions. Awareness of interaction patterns in the classroom can help PE teachers to manage classes and achieve important curricular goals to increase motivation (Roberts, Treasure & Conroy, 2007; Vallerand, 2007).

In the model, we assume that motivation mediates the relationship between trust in cooperation and learning behavior. Students with positive beliefs about cooperation showed a high cooperative learning motivation, whereas students with negative trust in cooperation showed low motivation toward cooperative learning process. Motivation is an important factor influencing learning behavior (Pintrich, 1999; Zimmerman & Schunk, 2011). We focus on the theory of hope-value, which is one of the most famous theories that describes the process of motivation in learning (Eccles & Wigfield, 2002). In this theory, students feel that hope and value lead to learning motivation. In this study, Self-efficacy was chosen as a factor of hope, and intrinsic value was chosen as a value factor. Self-efficacy is the belief that learners can successfully implement the behavior needed to produce results (Bandura, 1977). The intrinsic value refers to the reason of the learner to perform a task including the intrinsic importance and importance of perceived learning (Pintrich & De Groot, 1990). Because previous research has shown that self-efficacy and intrinsic value have a positive effect on learning behavior in individualistic learning (eg, Wolters & Pintrich, 1998), these variables also have a positive effect on cooperative learning.

Romero (2009) in his article illustrates the comparison between the effects of cooperative learning and traditional methods in secondary and post-secondary classes based on a systematic review of 2506 unpublished and published citations. The overall effect size (0.308) indicates that cooperative learning improves student achievement in science. Investigation of Jalilifar (2010) in which two Cooperative Learning techniques including Student Team and Group Investigation Division are used, test the achievement of "understanding of English as a Foreign Language." The researcher found that Student Team Achievement Division technique is more effective in improving reading achievement of EFL although both the technique cannot improve reading comprehension significantly. Metal and qualitative other studies conducted by Momtaz and Garner (2010) examine the effect of cooperative learning on "the reading of students in the non-Western (Iran) country in question. Collaborative readings show significantly higher values than private readings for all texts. Javadi Rahavard (2010) explores the relationship between cooperative learning strategies and reading comprehension. Cooperative learning methods have become a major part of the learning methodology debate. The paper is currently studying the effect of cooperative learning in an Iranian student EFL class quantitatively at an English institute at Bandar Abbas. The correlation coefficient formula using SPSS software, graphs and diagrams shows that group cooperative learning strategies achieve much better results than their counterparts in reading comprehension tests. In addition, Tok Hoon Seng (2012) examines the relationship between cooperative learning and achievement in the acquisition of English in literary classes in secondary schools. Four instruments including pre-test and post-test exams, questionnaires, classroom observations, and interviews are administered. The results showed a significant effect on the experimental group posttest. The qualitative part of this study shows that using cooperative learning strategies can improve the social behavior of learners.

Many researchers have examined the cooperative learning process in Japan (eg, Machi & Nakaya, 2014). To examine the process of cooperative learning, it is important to take into account "how learners think of cooperation". For example, there may be students who consider cooperative learning as positive to show better performance as students who consider it negative. Nagahama, Yasunaga, Sekita, & Kouhara (2009) developed a scale that measures the skills of Japanese undergraduates in cooperation in cooperative learning processes and reveals a scale with three subscale factors. First, the use of cooperation represents the belief of the usefulness of cooperation in cooperative learning. Second, individual orientation describes beliefs about the tendency to learn individually and avoid learning with friends. Third, injustice represents the belief that the benefits of cooperative learning vary from person to person. While it is necessary to examine how this Belief influences cooperative learning processes to promote them effectively in the classroom, little research has examined the effect of trust in cooperation in learning in cooperative learning.

From the definition above, it can be concluded that the learning outcomes are a product of learning achieved by a student in the form of a skill of learning

activities in the academic field school at a certain time period were recorded at each end of the semester in the evidence report called report cards.

Research Methods

Research design

This research uses experimental design methods to provide different treatment on two groups of samples, her condition homogeneous. One sample group was treated in the form of cooperative learning. Another group was given conventional treatment methods of learning. Then each group was divided into two, namely a control group and an experimental group with high motivation and the control group and experiment with low motivation.

Population and Sample Research

Hadi (1987: 220) provide limits on the study population is a population or an individual who at least has the same properties. While the sample is a population that's less than the population. (Hadi, 1987: 221).

Noting in this study were used as the study population was all students of class VII, then a sample of this population is as follows.

Table 1. Total Population and Sample Research

Number	School	Population	Samples
1	public junior high school 1 Gandusari	276	55
2	public junior high school 2 Kampak	238	55
	General	514	110

Method of collecting data

In this study, the data collection methods used are:

1. Method or questionnaire

   The questionnaire method used to obtain data on students' motivation class VII, public junior high school 1 Gandusari and Kampak in the school year 2009/2010.

2. Test Method

   The test was given in order to measure and determine student learning outcomes in the form of student scores on test day. The test conducted is to determine citizenship education learning outcomes of students.

Data analysis technique.

Analysis of the data used in this research is to use the technique of analysis of variance of two paths. Where previously the test requirements analysis, the normality and homogeneity.

Results

In the report the results of this study will be explained about the findings in the field at the time the researchers conducting the study. Research conducted on two different research sites, 1) study was conducted in a public junior high school 1 Gandusari, 2) public junior high school 1 Kampak.

Table 2 Normality Test Results Data Learning

One-Sample Kolmogorov-Smirnov Test

		Cooperative	Conventional
N		55	55
Normal Parameters [a,b]	Mean	66.5455	67.3455
	Std. Deviation	7.98568	10.14564
Most Extreme Differences	Absolute	.176	.147
	Positive	.157	.147
	Negative	-.176	-.125
Kolmogorov-Smirnov Z		1.308	1.092
Asymp. Sig. (2-tailed)		.065	.184

a. Test distribution is Normal.

b. Calculated from data.

Grades K-S for cooperative learning data values obtained 1.308 with significance probability value is above 0.065 and $\alpha = 0.05$ this means that the null hypothesis is accepted or pretest results data for cooperative learning classes are normally distributed. As for the class that uses conventional learning value obtained K-S 1.092 to 0.184 and the significance probability value is far above $\alpha = 0.05$ this means that the null hypothesis is accepted or pretest results data for conventional learning classes are normally distributed.

Table 3 Homogeneity Calculation Results Pretest

Test of Homogeneity of Variances

Test Scores

Levene Statistic	df1	df2	Sig.
3.897	1	108	.059

Based on the above table it can be seen that the probability value from the data above is 0.059, which means that the probability of > 0.05, it gives the sense that the data are homogeneous.

From the foregoing it can be seen that both places have the ability to study the same learning Citizenship Education, which both samples have the same properties or homogeneous.

From the results of these tests will be done post Anova test 2 previous track will be the prerequisite test with the following results.

Table 4 Normality Test Results Achievement Citizenship Education

One-Sample Kolmogorov-Smirnov Test

		cooperative	conventional
N		55	55
Normal Parameters [a,b]	Mean	81.4909	72.6545
	Std. Deviation	8.23919	9.32781
Most Extreme Differences	Absolute	.154	.139
	Positive	.154	.139
	Negative	-.140	-.115
Kolmogorov-Smirnov Z		1.139	1.033
Asymp. Sig. (2-tailed)		.149	.236

a. Test distribution is Normal.

b. Calculated from data.

Grades K-S for cooperative learning data obtained by the significance probability value 1.139 to 0.149 and far above the value α = 0.05 this means that the null hypothesis is accepted or achievement results data for cooperative learning classes are normally distributed. As for the class that uses conventional learning value obtained K-S 1.033 to 0.236 and the significance probability value is far above α = 0.05 this means that the null hypothesis is accepted or achievement results data for conventional learning classes are normally distributed.

Table 5. Homogeneity Test Results Civics Achievement Data students of class VII.

Descriptive Statistics

Dependent Variable learning outcomes:

Factor_A	Factor_B	Mean	Std. Deviation	N
cooperative	High motivation	81.4909	8.23919	55
	Low motivation	66.5455	7.98568	55
	generall	74.0182	11.02623	110
conventional	High motivation	72.6545	9.32781	55
	Low motivation	67.3455	10.14564	55
	T generall	70.0000	10.06037	110
l general	High motivation	77.0727	9.82013	110
	Low motivation	66.9455	9.09666	110
	generall	72.0091	10.72103	220

From the table above it can be seen that there are differences in the average results of learning achievement Citizenship Education in each class cooperative and conventional in students with high motivation and low motivation, further to test the significance level of the average yield is used *t-test*, with the following results.

Table 6 Different Test average of cooperative learning and conventional

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Civic education Achievement	Equal variances assumed	.913	.341	5.266	108	.000	8.83636	1.67816	5.50996	12.16277
	Equal variances not assumed			5.266	106.378	.000	8.83636	1.67816	5.50938	12.16334

From the table above obtained significant value under 0.05 (α <0.05), so it can be explained that there are differences in achievement Citizenship Education in the seventh grade students at public junior high school 1 Gandusari and public junior high school 1 Kampak using conventional teaching methods and learning methods cooperative.

Table 7. Different test average student with high motivation and low motivation cooperative learning

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
civic education achievement	qual variances ssumed	.066	.798	9.660	108	.000	14.94545	1.54717	11.87870	18.01221
	qual variances ot assumed			9.660	107.895	.000	14.94545	1.54717	11.87866	18.01225

From the table above obtained significant value under 0.05 (α <0.05), so it can be explained that there are differences in achievement Citizenship Education in the seventh grade students at public junior high school 1 Gandusari with public junior high school 1 Kampak who have high achievement motivation with the motivation underachieving on cooperative learning.

Table 8. Different test average student with high motivation and low motivation in learning Conventional

Independent Samples Test

		Levene's Test for Equality of Variance		*t-test* for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
civic education achievement	qual variances assumed	.572	.451	2.857	108	.005	5.30909	1.85836	1.62550	8.99268
	qual variances not assumed			2.857	107.246	.005	5.30909	1.85836	1.62521	8.99297

From the table above obtained significant value under 0.05 (α <0.05), so it can be explained that there are differences in achievement Citizenship Education in the seventh grade students at public junior high school 1 Gandusari with public junior high school 1 Kampak who have high achievement motivation with the motivation underachieving on conventional learning.

Table 9. Anava 2 Line Test Results

Tests of Between-Subjects Effects

Dependent Variable learning outcomes:

Source	Type III Sun of Squares	df	Mean Square	F	Sig.
Corrected Model	7805.727	3	2601.909	32.362	.000
Intercept	1140768.01	1	1140768.018	14188.776	.000
Factor_A	888.01	1	888.018	11.045	.001
Factor_B	5640.89	1	5640.891	70.161	.000
Factor_A * Factor_B	1276.81	1	1276.818	15.881	.000
Error	17366.25	216	80.399		
Total	1165940.00	220			
Corrected Total	25171.98	219			

a. R Squared = .310 (Adjusted R Squared = .301)

Based on the calculation and the results of tests conducted on each class can be explained that the results of learning Citizenship Education Seventh Grade Students of public junior high school 1 Gandusari and public junior high school 1 Kampak in year lesson 2009/2010, in early learning has the same ability, where the average results of the same study. After treatment by using cooperative learning there are significant differences in the results, there was an increase learning outcomes Citizenship Education in the seventh grade students of public junior high school 1 Gandusari and public junior high school 1 Kampak in year lesson 2009/2010.

It illustrates that by using cooperative learning to motivate students to learn and improve learning outcomes. Furthermore, the students who are still using conventional methods do not have the average difference significant study results, either before or after learning. This can be explained that the little material that can be absorbed in the conventional learning, as opposed to cooperative learning, where almost all of the material can be absorbed by the students, because students are directly involved in the problem are given, when students learn, do chores and interpret them, so that students more over matter. The average difference between classes with cooperative learning with conventional learning has significant differences, as shown by the *t value* is greater *t table* (5.266> 2.00) and the significance of difference to these two learning under 0.05.

In addition, the calculation by using analysis of variance 2 lines get value FA (*F count* to factors cooperative learning and conventional learning models) showed greater than *F table*, meaning that there is influence learning outcomes between cooperative learning model and conventional applied to students of class VII on the subjects of Civic Education in public junior high school 1 Gandusari and public junior high school 1 Kampak in the year lesson 2009/2010.

The result of this calculation indicates that the hypothesis can be accepted, where there are differences in learning outcomes Civics class VII at a public junior high school 1 Gandusari and public junior high school 1 Kampak in the year lesson 2009/2010 among which are taught using learning model cooperative and are taught using conventional learning models.

Students in the learning process are likely to have different levels of motivation to learn, where students have high achievement motivation and others

have low achievement motivation, differences in the motivation of these students provides its own influence on learning achievement Citizenship Education students. This is also shown by the different test average, in which the achievements of both (students with high motivation and students with low motivation) with the learning method is different, cooperative and conventional obtained different results between students who have high motivation and low both in method cooperative learning or conventional indicated by the *t value* > *t table*, respectively for cooperative learning and conventional are 9.660 and 2.857. In addition, by using analysis of variance 2 lines get value FB (*F count* to the level of student in high and low motivation) showed that the FB is greater *F table*, so it gives the sense that there is influence learning outcomes among students who have learning in high motivation and students who have low motivation in class VII on the subjects of Civic Education in public junior high school 1 Gandusari and public junior high school 1 Kampak in the school year 2009/2010.

This indicates that the second hypothesis can be accepted, meaning that there are differences in learning outcomes Civics class VII at a public junior high school 1 Gandusari and public junior high school 1 Kampak year lesson 2009/2010 between that which motivated high learning and which has a low learning motivation.

Calculations using 2-way analysis of variance also used to determine the interaction between A factor (cooperative learning and conventional learning models) with B factor (students with high motivation and students with low motivation).

Based on the subsequent calculation of the interaction between the two, cooperative learning and conventional learning with students who have high achievement motivation and low achievement motivation can be explained that by using analysis of variance 2

Findings

Based on the results of calculations and test results conducted on each class can be explained that, at the beginning of learning students have the same ability, Average learning outcomes are the same. Having been treated using demonstration methods and discussion methods there were significant differences in outcomes.

This illustrates that learning by using demonstration methods gives students the motivation to learn and improve their learning outcomes. Similarly, students using discussion methods also have a significant average of learning outcomes.

Implications

From the previous research and theory presented above, and thereafter conducted research found that the implications of using demonstration methods gave students the motivation to learn and improve their learning outcomes. Similarly, students using discussion methods also have a significant average of learning outcomes

Practical Implications

After doing research in Scholl Gandusari and Kampak, can be seen using the demonstration method to give students the motivation to learn and improve their learning result better.

Social implications

From the results of research in Scholl Gandusari and Kampak, then this can be applied in other school places.

Orisinality / Value

From the design of this study, the originality or value of research is to learn by using demonstration methods to motivate students to learn and improve their learning outcomes. Similarly, students using discussion methods also have a significant average of learning outcomes.

Bibliography

Anderman, E. M., & Anderman, L. H. (2013). *Classroom motivation* (2nd ed.). Columbus:Pearson https://www.pearson.com/us/higher-education/program/Anderman-Classroom-Motivation-2nd-Edition/PGM157822.html

Bandura, A. (1977). Self-Efficacy: Toward a Unifying Theory of Behavioral Change. Psychological Review, 84, 191-215. http://dx.doi.org/10.1037/0033-295X.84.2.191

Carin, A. A. (1993). *Teaching modern science*. New York: Merrill. http://www.ebooksdownloads.xyz/search/teaching-modern-science.

Doymuş, K., Şimşek, & Ü., Bayrakçeken, S. (2004). "İşbirlikçi Öğrenme Yönteminin Fen Bilgisi Dersinde Academic Başarı ve Tutuma Etkisi", Türk Fen Eğitimi Dergisi, Yıl 1 Sayı 2; 103- 115. From http://egitimarastirmasi.ueuo.com/ogrenme/2004aralik.pdf

Doymuş, K., Şimşek, Ü. ve Şimşek, U. (2005). İşbirlikçi öğrenme yöntemi üzerine derleme: I.İşbirlikçi öğrenme yöntemi ve yöntemle ilgili çalışmalar. Erzincan Eğitim Fakültesi Dergisi, 7 (1), 59-83.From http://dergipark.gov.tr/download/article-file/67185

Eccles, J. S., & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. Annual Review of Psychology, 53 , 109-132. http://dx.doi.org/10.1146/annurev.psych.53.100901.135153

Güvenç H. ve Açıkgöz, K. Ü. (2007). İşbirlikli öğrenme ve kavram haritalarının öğrenme stratejisi kullanımı üzerindeki etkileri. Kuram ve Uygulamada Eğitim Bilimleri, 7 (1), 95- 127. From http://www.kuyeb.com/pdf/tr/f101e2ee17a5ef87808eb8ac52843f04cFULL.pdf

Hadi Sutrisno. 1987. *Statistics Volume 2*. Yogyakarta: YPFP. UGM

Hascher, T. (2004). *Wohlbefinden in der Schule [Well-being at school]*. Münster: Waxmann https://www.waxmann.com/waxmann-buecher/?no_cache=1&tx_p2waxmann_pi2%5Bbuchnr%5D=1354&tx_p2waxmann_pi2%5Baction%5D=show&tx_p2waxmann_pi2%5Bcontroller%5D=Buch&cHash=6590a110acea85c4413092ccd9e56faa

Heckhausen J., & Heckhausen H. (2010) Motivation und Handeln: Einführung und Überblick. In: Heckhausen J., Heckhausen H. (eds) Motivation und Handeln. Springer-Lehrbuch. pp 1-9. https://doi.org/10.1007/978-3-642-12693-2_1

Jalilifar, A. (2010). The Effect of Cooperative Learning Techniques on College Students' Reading Comprehension. *International Journal of Educational Technology and Applied Linguistics,* *38*(1), 96-108. http://dx.doi.org/10.1016/j.system.2009.12.009.

Machi, T., & Nakaya, M. (2014). Reciprocal Teaching Intervention in Elementary Mathematics Classrooms: Children's Social Goals, Interactive Processes, and Academic Achievement. Japanese *Journal of Educational Psychology, 62* , 322-335. http://dx.doi.org/10.5926/jjep.62.322

Momtaz, E., & Garner, M. (2010). Does collaborative learning improve EFL learners‟ reading comprehension? *Journal of linguistics and language teaching*, *1*(1), 15-36. https://sites.google.com/site/linguisticsandlanguageteaching/home-1/volume-1-2010-issue-1---table-of-contents/volume-1-2010-issue-1---article-momtaz-garner

Nagahama, F., Yasunaga, S., Sekita, K., & Kouhara, S. (2009). Development of a Scale to Measure Belief in Cooperation. Japanese *Journal of Educational Psychology*, *57* , 24-37. http://dx.doi.org/10.5926/jjep.57.24

Pintrich, P. R. (1999). The Role of Motivation in Promoting and Sustaining Self-Regulated Learning. International Journal of Educational Research , 31 , 459-470. http://dx.doi.org/10.1016/S0883-0355(99)00015-4

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and Self-Regulated Learning Components of Classroom Academic Performance. Journal of Educational Psychology , 82, 33-40. http://dx.doi.org/10.1037/0022-0663.82.1.33

Roberts, G. C., Treasure, D. C., & Conroy, D. E. (2007). Understanding the dynamics of motivation in sport and physical activity: An achievement goal interpretation. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (pp. 1–30). http://onlinelibrary.wiley.com/resolve/doi?DOI=10.1002/9781118270011.ch1

Romero C. C. (2009). *Cooperative learning instruction & science achievement for secondary and early post-secondary students: A systematic Review*. Unpublished Doctoral Dissertation, Colorado State University. USA. Retrieved April 12, 2012, from http://www.educationendowmentfoundation.org.uk/.../collaborative-learning/referen

Slavin, R.E. (1995). Cooperative learning: Theory research and practice. 2nd edition Beston: Allyn and Bacon.. http://onlinelibrary.wiley.com/doi/10.1002/9781118133880.hop207008/abstract

Telama, R., & Polvi, S. (2007). Facilitating prosocial behaviour in physical education. In Liukkonen, J. & European Sport Psychology Association. *Psychology for physical educators: student in focus* (2nd ed). Chapter 6 (pp. 85-99). Human Kinetics, Champaign, IL. https://trove.nla.gov.au/version/30264124

Vallerand, R. J. (2007). Intrinsic and extrinsic motivation in sport and physical activity: A review and a look at the future. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (pp. 59–83). http://onlinelibrary.wiley.com/resolve/doi?DOI=10.1002/9781118270011.ch3

Weiner, B. (1974). *Achievement motivation and attribution theory*. Morristown: General Learning. http://www.worldcat.org/title/achievement-motivation-and-attribution-theory/oclc/1031013

Weiner, B. (1994). Ability versus effort revisited: The moral determinants of achievement evaluation and achievement as a moral system. *Educational Psychologist*, *29*, 163–172. https://doi.org/10.1207/s15326985ep2903_5

Wigfield, A., & Cambria, J. (2010). Students' achievement values, goal orientations, and interest: Definitions, development, and relations to achievement outcomes. *Developmental Review*, *30*, 1–35. https://doi.org/10.1016/j.dr.2009.12.001

Wigfield, A., Eccles, J. S., Roeser, R., & Davis-Kean, P. (2006). Development of achievement motivation. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* (6th ed., pp. 933–1002). New York: Wiley. http://psycnet.apa.org/record/2006-08776-015

Wolters, C. A., & Pintrich, P. R. (1998). Contextual Differences in Student Motivation and Self-Regulated Learning in Mathematics, English, and Social Studies Classrooms. Instructional Science , 26, 27-47. http://dx.doi.org/10.1007/978-94-017-2243-8_6

Zimmerman, B. J., & Schunk, D. H. (2011). *Handbook of self-regulation of learning and performance*. New York: Routledge. https://www.routledge.com/Handbook-of-Self-Regulation-of-Learning-and-Performance/Schunk-Zimmerman/p/book/9780415871129.