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# Examination The Effect of Values Education Which is Given Adolescents on Self-Regulation Strategies

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The purpose of this study is to test the effect of values education which is applied to adolescents on their self-regulation strategies. The research was carried on the third grade students in Çumra Trade Vocational High School in Konya in 2011-2012 education years. Six female and five male students were tested in both experimental and control group. Firstly, pre-test was conducted on experimental and control groups in the research. Secondly, values education activities which consist 20 sessions were conducted on experimental group twice a week out of the lessons. Activities were performed by the researcher. On the other hand, no activities were applied on control group. It is seen, there is a significant difference between the pre-test scores and post-test scores of the experimental group in favour of the post-test in the aspect of self-regulation at the end of the research. Also, It is found that, there is a crucial difference in utilization of cognitive strategy, self-efficacy, intrinsic value and test anxiety of students between experimental and control group. According to the findings, it is concluded that the values education which was applied to adolescents, has positive effects on the development of the self-regulation strategies.

## Introduction

Education is defined as, variations of behaviours with the effect of other people (Başaran, 1991). It can be said that, a value education programme which includes affective sides of education should be prepared for changing these behaviours. Although it is commonly agreed that it is helpful to change behaviours, it is a topic of discussion when values education should be given (Dilmaç, 2007; İşcan, 2007; Lamberta, 2004). Some of the researcher suggest that values education can always be applied (Dilmaç, 2007) others argue that because adolescents, who experience puberty in the most intense are open to change, this term becomes important for them (Kuşcu, 2009). The stage which includes puberty, takes place identity crisis (Cebeci, 2005). It is thought; values education which is given adolescents will be more effective on this term because adolescents who experience identity crisis will find their identity easier with the help of values education. On the other hand, according to research by Knafo and Schwartz, discussions in the family about values, reveal negative feelings (Knafo & Schwartz, 2003). This negative situation can reduce motivation of adolescents, when it is contrast to parents' values and it can break down adolescents'

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comprehension about parents' values and ability of comprehension. Therefore, it is very important to increase adolescents' motivational beliefs and self-regulation strategies, which influence these motivational beliefs (Zimmerman, 1990; Cabı, 2009).

### *Definitions of Values, Values Education*

Although a lot of researches have been made, they haven't reached at a common view about the definition of "value" concept. Value can be expressed as an imaginary scale which is used to determine the importance of something (TDK, 2007). Values are also, defined as main rules that base on value judgements (Halstead, 1996: 6). It is to made choice and judged between alternatives that are based on distinction of good or bad helping of values. Values represent ideal desires that people want rather than people have. It is claimed that everything in the world can be separated as good or bad and value can be defined as good, bad or good and bad (Dunlop, 1996: 69). Garia handles values as tangible and intangible. According to Garia, value is described as positive or negative ideas that represent a specific behaviour and aim of the existence. As a point of moral view, value is expressed as the key of moral and religion (Nesbitt & Henderson, 2003: 77) and as a point of cultural view; value is expressed as means which are used to reach desired will (Kluckhohn, 1951: 395). When philosophical movements are thought, it is seen that, different views about the definition of value are exist. According to idealists due to universe is infinite and worldwide, values are same everywhere and they are universal principles. Realists advocate that it is necessary that values should be built according to the laws of nature. Pragmatists argue that values can change every condition; on the other hand existentialists express individuals should choose values with their own will (as cited in Akbaba-Altun, 2003, p. 9).

### *Definitions of Self-Regulation Strategies*

Other variable of research is "self-regulation" concept. No matter how process of education is good, learning depends on student's motivation and tendency to learning. So it is very important to educate student according to learning style which is effective on them. The need of learning and regulation in each environment for individual reveals as "self-regulation" concept (Pintrich, 2000:483). Self-regulation is a versatile combination of variables related to motivation and some processes (Cleary and Zimmerman, 2004:537). Researches about self-regulation (Zimmerman, 2008; Cabı, 2009) demonstrate a positive significant relation between self-regulation learning strategies, motivation beliefs and academic achievement. For this reason, preparing self-regulation activities is a necessity for students because these activities help students with learning effectively in the school and out of school (Altun and Sertel, 2006; cited in Cabı, 2009, p.4). It can be said by improving cognitive, motivational and behavioural strategies of students, students' intrinsic impulse can rise.

The self-regulated learning strategies are methods that students use to achieve learning goals (Chih, 2006: 5). These strategies are related to the regulation of academic cognitive (Zimmerman and Pons, 1986). The regulation of academic cognitive strategies are classified as cognitive methods, self-regulation strategies which are used for regulating academic cognition (metacognitive strategies) and resource management strategies (Zimmerman and Pons, 1986). Cognitive strategies are stated as cognitive behaviours that are performed to achieve a learning goal (Schneider and Weinert, 1990; cited in Salovaara, 2005, p.21). These strategies are classified as rehearsal, elaboration and organization strategies (Salovaara, 2005: 23). Metacognitive strategies are related to monitoring and regulation of individual's own cognitive process (Alexander et al. , 1991). Metacognitive strategies include planning, monitoring and regulating activities (Zimmerman and Martinez-Pons, 1986). Resource

management strategies are methods which are related to check and manage the effect of individual's environment (Pintrich, 1993; cited in Chih, 2006, p.42). There are also motivational beliefs which encourage the use of these strategies (Üredi, 2005: 25). These motivational beliefs are goal orientation, task value and self-efficacy (Roberts, 1992; cited in Chih, 2006, p.21). Also emotional reactions, which are related to tasks of learner, are stated as affective activities (test anxiety) by Pintrich (Pintrich ve De Groot, 1990; cited in Üredi, 2005, p.25).

### *Purpose of the study*

The aim of this study is to test the effect of values education which given adolescents on their self-regulation strategies.

### *Hypothesises of Survey*

1. Values education, which was given adolescents, increases self-regulation.
2. Values education, which was given adolescents, increases cognitive strategy usage.
3. Values education, which was given adolescents, increases self-efficacy.
4. Values education, which was given adolescents, intrinsic value.
5. Values education, which was given adolescents, reduces test anxiety.

## Method

This study was performed with experimental test model. The experimental method is a type of research in which the observing data is created to explore the causality of relations between the variables, which are taken over by the researcher (Karasar, 2007). The research was carried on the third grade students in Çumra trade vocational high school in Konya in 2011-2012 education years. Six female and five male students were tested in both experimental and control group. The process of the research covers in March - June 2012.

## Data collection tool

### *Motivated Strategies for Learning Questionnaire*

The self-regulation strategies and motivational beliefs of students are tested in the research with "Motivated Strategies for Learning" questionnaire created by Pintrinch and DeGroot (1990) and adapted by Üredi (2005). 44 sentences and 7 levels in the questionnaire are applied. It includes two dimensions, which constitute of self-regulation strategies and motivational beliefs in questionnaire. The dimension of self-regulation strategy involves two scales which are related to the cognitive strategy use (13 sentences) and self-regulation (9 sentences). On the other hand the dimension of motivational beliefs includes three scales which are related to self-efficacy (9 sentences), intrinsic value (9 sentences) and test anxiety (4 sentences). Cognitive strategy dimension includes rehearsal, elaboration and organization and self-regulation dimension involves metacognitive strategies like planning, monitoring and regulating. Self-efficacy scale of motivational beliefs dimension tests determine perception, which is related to performance of classroom and reliance. Moreover, intrinsic value scales of dimension of motivational beliefs are related to perception the importance of classroom study. Test anxiety scale of dimension of motivational beliefs tests perception related to exams. Cronbach alfa values are calculated as 84 in self-regulation scale, 92 in self-efficacy scale, 88 in intrinsic value scale and 81 in test anxiety scale (Üredi, 2005).

Activities which were used in values education programme have been prepared by researcher before practise. Practise has performed between March and June 2012. As beginning, pre-tests have been conducted on experimental and control group. Later activities were carried on experimental group in 2 hours in a week. Activities were performed by researcher. At the end of practice, post-tests were conducted on experimental and control group and compared.

**Analysis of Data**

Analysis of Covariance was performed in the research to measure the effectiveness of experimental process. Also it is used to compare the result of pre-test and post-tests. After practice, the results of survey were analysed in SPSS programme.

***Findings***

Findings related hypothesises are presented in this section. Statistics of that "values education given adolescents increased self-regulation" were given in Table 1 and Table 2.

**Table 1.** According to Groups Self-regulation of Post-Test Average Scores Descriptive Statistics

| ***Groups*** | ***N*** | ***Average*** | ***Recovered Average*** |
|---|---|---|---|
| Experimental | 11 | 57.83 | 57.98 |
| Control | 11 | 27.18 | 27.02 |

As, it can be seen from Table 1, it is discovered that average of experimental group is 58, 83; average control group is 27, 18. Average of post-tests and control group, 57, 98 and 27, 02 respectively. The results of ANCOVA which to test difference between recovered average are given in Table 2.

**Table 2**. The Result of Recovered Post-Test Average Scores according to Groups Self-regulation Pre-test Results (ANCOVA Results)

| ***Var. K.*** | ***KT*** | ***Sd*** | ***KO*** | ***F*** |
|---|---|---|---|---|
| **Intrinsic Value Pre-Test (Reg.)** | 708.042 | 1 | 708.042 | 11.706** |
| **Group** | 5269.969 | 1 | 5269.969 | 587.127** |
| **Error** | 1149.231 | 19 | 60.486 | |
| **Total** | 46757.000 | 22 | | |

*p<, 005; **p<, 001

It is understood that, according to ANCOVA there is an important difference between self-regulation of groups [F (1; 22) = 11.706, p<.001]. Therefore, self-regulation of experimental group given values education ($\overline{X}$ = 57.98,) is higher than self-regulation of control group ($\overline{X}$ =27.02) in significant level.

Statistics of the second hypothesis that was "values education given adolescents increased cognitive strategy usage" were given in Table 3 and Table 4.

**Table 3.** According to Groups Cognitive Strategy Usage of Post-Test Average Scores Descriptive Statistics

| ***Groups*** | ***N*** | ***Average*** | ***Recovered Average*** |
|---|---|---|---|
| Experimental | 11 | 70.18 | 69.85 |

| | | | |
|---|---|---|---|
| Control | 11 | 45.36 | 45.69 |

As it is seen from Table 4, it is discovered that average of experimental group is 70, 18; average control group is 45, 36. The results of ANCOVA which to test difference between recovered average are given in Table 4.

**Table 4.** The Result of Recovered Post-Test Average Scores according to Groups Cognitive Strategy Use Pre-test Results (ANCOVA Results)

| ***Var. K.*** | ***KT*** | ***Sd*** | ***KO*** | ***F*** |
|---|---|---|---|---|
| **Intrinsic Value Pre Test (Reg.)** | 697.790 | 1 | 697.790 | 12.386** |
| **Group** | 3199.629 | 1 | 3199.629 | 56.795** |
| **Error** | 1070.392 | 19 | 56.336 | |
| **Total** | 78585.000 | 22 | | |

*p<, 05; **p<, 01

According to the result of ANCOVA, it is understood that, according to the result of ANCOVA there is a significant difference between self-regulation of groups [$F_{(1;\ 22)}$ = 11.706, p<.001]. Cognitive strategy usage of experimental group given values education ($\overline{X}$ =69.85), is higher than cognitive strategy usage of control group ($\overline{X}$ =45.69) in significant level.

The third hypothesis of research was "values education given adolescents increased self-efficacy". With this aim, the statistics were given in Table 5 and 6.

**Table 5.** According to Groups Self-efficacy of Post- Test Average Scores Descriptive Statistics

| ***Groups*** | ***N*** | ***Average*** | ***Recovered Average*** |
|---|---|---|---|
| Experimental | 11 | 67.09 | 66.96 |
| Control | 11 | 30.91 | 31.08 |

The average of experimental group and control group are calculated as 67.09 and control group is 30.91. Average of post-tests of groups and control group 66, 96 and 31, 08 respectively. The results of ANCOVA which to test difference between recovered average are given in Table 6.

**Table 6.** The Result of Recovered Post-Test Average Scores according to Groups Self-Efficacy Pre-test Results (ANCOVA Results)

| ***Var. K.*** | ***KT*** | ***Sd*** | ***KO*** | ***F*** |
|---|---|---|---|---|
| **Self-efficacy pre-test (Reg.)** | 46.684 | 1 | 46.684 | 1.776* |
| **Group** | 7042.114 | 1 | 7042.114 | 264.880** |
| **Error** | 505.134 | 19 | 26.586 | |
| **Total** | 60574.000 | 22 | | |

*p<, 005; **p<,001

According to the result of ANCOVA it is understood that, there is a significant difference between self-efficacy of groups [$F_{(1;\ 22)}$ = 1.776, p<.005]. According to this, self-efficacy of experimental group given values education ($\overline{X}$ =66.96,) is higher than self-efficacy of control

group ($\overline{X}$ =31.08) in significant level.

The forth hypothesis of research was "values education given adolescents increased intrinsic value". With this aim, the statistics were given in Table 7 and 8.

**Table 7.** According to Groups intrinsic value of Post-Test Average Scores Descriptive Statistics

| ***Groups*** | ***N*** | ***Average*** | ***Recovered Average*** |
|---|---|---|---|
| Experimental | 11 | 56.189 | 56.159 |
| Control | 11 | 34.090 | 34.114 |

It is found that average of experimental group is 56.189; average control group is 34.090. Average of post-test of groups and control groups 56,159 and 34,114 respectively. The results of ANCOVA which to test difference between recovered average are given in Table 8.

**Table 8.** The Result of Recovered Post- Test Average Scores according to Groups Intrinsic Value Pre-test Results (ANCOVA Results)

| ***Var. K.*** | ***KT*** | ***Sd*** | ***KO*** | ***F*** |
|---|---|---|---|---|
| **Intrinsic Value Ön Test (Reg.)** | 91.461 | 1 | 91.461 | 3.260* |
| **Group** | 2672.393 | 1 | 2672.393 | 95.249** |
| **Error** | 533.084 | 19 | 28.057 | |
| **Total** | 48129.000 | 22 | | |

*p<05; **p<,001

According to the result of ANCOVA, it is understood that there is a significant difference between intrinsic value of groups [F (1; 22) = 3.260, p<.005]. According to this, self-efficacy of experimental group given values education ($\overline{X}$ =56.159) is higher than intrinsic value of control group ($\overline{X}$ =34.114) in significant level.

The fifth hypothesis of research was "values education given adolescents reduced test anxiety". With this aim, the statistics were given in Table 9 and 10.

**Table 9**. According to Groups test anxiety of Post- Test Average Scores Descriptive Statistics

| ***Groups*** | ***N*** | ***Average*** | ***Recovered Average*** |
|---|---|---|---|
| Experimental | 11 | 8.545 | 8.804 |
| Control | 11 | 14.636 | 14.378 |

The average of experimental group and control groups are calculated as 8.545 and 14.636. Average of post-test of groups, and control group 8.804 and 14.378 respectively. The results of ANCOVA which to test difference between recovered average are given in Table 10.

**Table 10**. The Result of Recovered Post- Test Average Scores according to Groups Test Anxiety Pre-test Results (ANCOVA Results)

| ***Var. K.*** | ***KT*** | ***Sd*** | ***KO*** | ***F*** |
|---|---|---|---|---|
| **Intrinsic Value Pre Test (Reg.)** | 80.181 | 1 | 80.181 | 4.440* |
| **Group** | 167.761 | 1 | 167.761 | 9.290** |
| **Error** | 343.091 | 19 | 18.057 | |
| **Total** | 3583.000 | 22 | | |

*p<05; **p<, 001

According to the result of ANCOVA, it is understood that, there is a significant difference between test anxiety of groups [$F_{(1;\ 22)}$ = 4.440, p<.005]. According to this, test anxiety of experimental group given values education ($\overline{X}$ =8,804) is lower than test anxiety of control group ($\overline{X}$ =14,378) in significant level.

**Conclusion**

The effect of the values education given adolescents on self-regulation strategies and on motivational beliefs which provide the usage of self-regulation strategies is discussed and interpreted in this section.

The first hypothesis of research was "values education given adolescents increased self-regulation". This hypothesis means values education given adolescents has increased self-regulation which includes metacognitive strategies which include monitoring, planning, regulating and resource management strategies. "Toiling", "sharing", "patience", "analysing you", "recognition you", "curiosity", "managing time effectively", "leadership", "interested in all life" activities are presented in values education programme. To remind learners how to describe himself/ herself and his/her environment, helping learners to remember when learner forgets something, to remind them in which occasions they can take leadership and recognize the importance of time are aimed in these activities. It is thought that these activities help learner with making own plan and to remind her/him necessary documents when learner needs it and with these way, helping learners to solve the problem with their families or friends on his/her own. Thus it is supposed that these activities are related to self-regulation. Also they increased self-regulation.

The second hypothesis of research was "values education given adolescents has increased self-regulation strategies which include rehearsal, elaboration, organization strategies. "Loving learning" and loving success" activities are presented in values education programme. To teach learner the most effective and the quickest learning method, and to show happiness when learners gain information permanently are aimed in these activities. It is thought that these activities are related to creating the easiest way of learning for students who have different physical, social, musical, naturalist, intrinsic, verbal, mathematical and visual intelligence. Thus, it is supposed that learner will succeed with creating their own learning style at the end of these activities. It is thought that students become more successful about connecting old and new informations at the end of activities. Their motivation is increased by the effect of reaching their aim. Thus their memories become stronger. Therefore it is thought these activities have positive effect on the cognitive strategy use.

The third hypothesis of research was "values education given adolescents increased self-efficacy". This hypothesis means values education given adolescents has increased self-efficacy. "Initiative", "self-confidence" and "courage" activities are presented in values education programme. It is aimed that learner should trust himself/herself completely in these activities. It is thought that these activities increased self-confidence and motivated her/him. Thus it is supposed that these activities have positive effect on self-efficacy.

The forth hypothesis of research was "values education given adolescents has increased intrinsic value in a positive way. This hypothesis means values education given adolescents has increased task value from self-regulation strategies and intrinsic value from goal

orientation. "Learning loving", "analysing you", "loving success", "curiosity", "knowing you", "loyalty" and "sensitivity" activities are presented in values education programme. It is aimed that learner should realize his/her own characteristics, be careful about choosing the best for her/him and improve his/her abilities in these activities. It is thought that students want to know something for their own sake at the end of these activities. Thus it is supposed that these activities are related to intrinsic value and have positive effect on intrinsic value.

The fifth hypothesis of research was "values education given adolescents reduced test anxiety". This hypothesis means values education given adolescents has reduced test anxiety. "Risk taking", "controlling themselves" and "responsibility" activities are presented in value education programme. It is aimed in these activities that learner should know him/her responsibilities and control himself/herself in stress occasion and take risk if it is necessary. It is thought that these activities help student not to panic before exam and control him/her. Thus, it is assumed that these activities are related to test anxiety and have negative impact on test anxiety.

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