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Full Length Research Paper

Effect of Leadership Styles of School Principals on Organizational Citizenship Behaviors¹

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The aim of this research is to investigate the relationship between the leadership styles of principals and organizational citizenship behaviors of teachers according to teachers' perceptions. In this research, a relational survey model was used. Data for the research were obtained from 1,723 teachers working in public and private schools which were subject to Ministry of National Education in the Kadikoy district of Istanbul province in 2014. In this research, data were collected through "Personal Information Form" developed by the researcher, and "Effects of Leadership Styles of Principals on Organizational Citizenship" inventory consisting of "Leadership Styles Scale" and "Organizational Citizenship Scale". The inputs of data obtained from respondents were entered via SPSS 17.0; data of the research were analyzed by "average", "standard deviation", "Pearson correlation coefficient moments" and "regression analysis". According to the analysis results obtained in the research, teachers' average perceptions regarding the transformational and transactional leadership characteristics of principals and the average of acting in organizational citizenship behavior were high. There was a positive highly significant relationship between the transformational and transactional leadership characteristics of principals and the organizational citizenship. Transformational leadership positively affects the level of organizational citizenship more than transactional leadership.

Key words: Leadership styles, organizational citizenship behavior, school culture.

INTRODUCTION

Change is an inevitable fact of life, and the only thing that does not change is change itself. Change is a law, and it is an obvious fact the basic starting point of all changes is progress and "development". Along with this rapid change, individuals who can choose what is needed from within a complex range of information sources, can join parts together, have developed an intuition, empathy and understanding, and have gained a social, cultural and political identity needed at the present time. In this

change, development and information age, raising innovative and entrepreneurial individuals with a spirit of leadership who know themselves well, can use their capacity in the most efficient manner by being aware of their facilities and capabilities and who have a solid character structure have now become the most important issue of today (Avci, 2015c: 87). At this point, the critical need for effective leadership styles and organizational citizenship behaviors is obvious for the efficient

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functioning of the education and training system, the creation of a healthy school climate and the achievement of an atmosphere in which people make extra efforts and sacrifices are made in educational institutions. The leadership characteristics of school principals directly and very significantly affect the organizational citizenship behaviors felt in the school especially those working in the school, organizational trust, commitment, school culture and climate and the quality of education and training.

The presence of charismatic, virtuous, well-informed, visionary, entrepreneurial, principled and hardworking manager-principals is vital in the formation of an understanding that can organize individuals showing maximum effort. These are individuals who are motivated beyond normal expectations to achieve the objectives of the organization, are successful, efficient, innovative and entrepreneurial, can renew themselves according to the existing conditions and make progress towards achieving the same goal with all employees as members of a team and through fostering a team spirit (Leithwood and Jantazi, 2006: 204; Barnett et al., 1999: 25) in educational institutions. As in the functioning of all institutions (Leithwood, 1992: 9; Bogler, 2001: 663 as cited in Avci, 2015b: 2759), "Organizational Citizenship Behavior" is the most important issue which is considered and investigated concerning the high-performance of the organizations, and their capacity to exert extra effort by working beyond expectations and being able to demonstrate an organizational behavior committed to the organization's vision, mission, values and goals by creating the culture of "we are a big family" among employees (Bateman and Organ, 1983; Podsakoff et al., 1997; DiPaola and Tschannen-Moran, 2001; DiPaola and Hoy, 2005; Nguni et al., 2006; Burns and Carpenter, 2008; Bogler and Somech, 2005 as cited in Avci, 2015a: 719).

When viewed from this aspect, the importance of the leadership styles and organizational citizenship behaviors to promote the success of schools, educational institutions and the education system in the country and in being able to give what is needed becomes clear.

THEORETICAL FRAMEWORK

Leadership styles

Leadership is a process in which the individual affects other group members to achieve the defined success or organizational objectives (Lunenburg and Ornstein, 2013: 100). Burns and Bass evaluated leadership in two main topics including transactional leadership which is dependent on more traditional styles, in which there is a mutual exchange between leader and the followers, and a rewarding principle is executed (Yukl, 1989: 271; Bass, Avolio, Jung and Berson, 2003: 208), and transformational leadership in which the leader establishes a

connection between followers and employees, affects the employees, is role model for them, encourages them to work faithfully beyond their performance, and exerts efforts to achieve the objectives of the organization in unity and solidarity acting with a team spirit (Yukl, 1989: 272; Bass, 1997: 131; MacKeinzce et al., 2001: 116; Avolio et al., 1999: 460).

In general, the sub-dimensions of transformational leadership are evaluated under four headings: 1) Idealized influence-charisma: Leader is a person who is admired, respected and trusted. 2) Motivation with suggestion: Leader motivates and encourages the followers about the organization's aims and objectives. 3) Intellectual stimulation: Leader encourages the followers to approach events, situations and problems with a new and different perspective. 4) Individual attention: Leader pays regard to individual differences and needs of the employees and gives the necessary importance to them, (Bass, 1997: 133; Bass and Steidlmeier, 1999: 187; Bass et al., 2003: 208). The sub-dimensions of transactional leadership are evaluated under three headings: 1) Conditional rewarding: Leader clearly informs followers about the expectations of the organization from them, and states that they will be rewarded in the event that these expectations are met. 2) Management with exceptions: Management with exceptions is divided into two in itself as active and passive: a) Management with active exceptions: Leader intervenes in and corrects the mistake in case of deviation from the standards and rules. b) Management with passive exceptions: Leader does not intervene in the system until problems become serious. 3) Leadership giving full freedom: Leader is motionless, ineffective, indecisive and reluctant. Leader avoids taking responsibility (MacKeinzce et al., 2001: 116; Bass, 1997: 133; Bass et al., 2003: 208).

Transformational leadership has a very important place for educational institutions (Leithwood, 1992: 10; Pounder et al., 1995: 586). Transformational school principals act in unity and solidarity with all employees in the school especially teachers, are role model to teachers with their visionary and charismatic personalities for the achievement of the objectives of the school, support teachers not to have feelings of anxiety, stress and burnout but to be strong and enthusiastic (Leithwood, 1992: 9; Barnett et al., 1999: 26; Decker, 1989: 48). Transformational school principals are entrepreneurial, innovative, respectful of ethical values, fair, principled and virtuous, they follow technology and scientific developments and renew, modify and improve their schools within the frame of these data, and they lead teachers educationally (Larsen, 1985: 21; Hoy and Tarter, 2004: 254; Greenfield Jr, 2004: 180; Anderson, 1991: 22). Transformational school principals have expectations according to teachers' facilities and capabilities by paying attention to their individual differences, make an effort for the personal and institutional developments of teachers for the school and students to be more efficient, and create the learning organization culture (Leithwood and

Jantazi, 2006: 204; Silins and Mulford, 2004: 445).

Investigations have been made concerning many issues associated with the leadership styles in educational management as well as in almost all areas of management science (Hoy and Miskel, 2010; Lunenburg and Ornstein, 2013). Especially when we look at investigations examining transformational and transactional leadership styles, investigations on the effect of transformational transactional leadership characteristics on job satisfaction (Bogler, 2001), the effect of transformational leadership characteristics on teacher behaviors and student achievement (Leithwood and Jantezi, 2006), the effect of transformational leadership characteristics on teachers' trust and working characteristics (Geisel et al., 2003), the effect of transformational leadership characteristics on teachers' job satisfaction, school culture and students' achievements (Barnett et al., 2001), the effect of transformational leadership characteristics on teachers' burnout (Leithwood et al., 1996), the effect of transformational leadership characteristics on teacher behaviors and student performance (Koh et al., 1995) draw the attention.

Many studies and research studies have been made regarding the leadership characteristics of school principals and the associated variables within a country's education system: School principals' leadership styles and learning organization (Korkmaz, 2008), leadership and performance (Korkmaz, 2005b), leadership roles of school principals (Tahaoglu and Gedikoğlu, 2009), leadership and burnout in teachers (Cerit, 2008), leadership and job satisfaction in teachers (Yılmaz and Ceylan, 2011), leadership, endogenous school variables and student outcomes (Korkmaz, 2006), leadership and organizational commitment (Buluç, 2009a), leadership and organizational citizenship (Oğuz, 2011; Özdemir, 2010), leadership tendencies and learning styles (Arslan and Uslu, 2014), leadership styles in terms of different variables (Cemaloğlu, 2007b), leadership behaviors, opinions of managers and teachers (Özdemir et al., 2015), leadership styles and intimidation (Cemaloğlu, 2007a), leadership and organizational culture (Şahin, 2011b; Koşar and Çalık, 2011), school principals' leadership behaviors and organizational trust (Kürşad, 2004), leadership and bureaucratic school structure (Buluç, 2009b), leadership styles and organizational commitment (Buluç, 2009), instructional leadership and school culture (Şahin, 2011a; Şahin, 2011c). There are also studies that particularly focus on the transformational and transactional leadership characteristics of school principals: Transformational and transactional leadership and organizational commitment (Ceylan et al., 2005), transformational and transactional leadership styles (Şahin, 2005), transformational leadership, strength and team effectiveness (Özaralli, 2002), transformational leadership, organizational citizenship and organizational justice (Arslantaş and Pekdemir, 2007), core values with

transformational and transactional leadership (Ergin and Kozan, 2004), transformational leadership characteristics (Çelik and Eryılmaz, 2006; Akbaba-Altun, 2003 as cited in Avcı, 2015e: 170).

Organizational citizenship behaviors

Organizational citizenship behavior is defined as discretionary individual extra role behavior that is not directly involved or defined within the formal reward system and which contributes to the efficiency of the functions of the organization as a whole (Bateman and Organ, 1983: 588). Although, there are different viewpoints, Organ grouped the dimensions of organizational citizenship behavior under five headings (Podsakoff et al., 1990: 115-116; Podsakoff et al., 1996: 279-280; Podsakoff et al., 2000: 516-517; DiPaola and Tschannen-Moran, 2001: 431-432 as cited in Avcı, 2016: 320): 1) Altruism: The individual helps workmates and beginners voluntarily and willingly; 2) Courtesy: The prevention of potential problems that may arise through informing, reminding, the transmission of useful information, the fulfillment of the tasks more efficiently by the efficient use of time and facilities; 3) Conscientiousness: The individual fulfills the duties in a volunteer attitude beyond the role behaviors expected from him; 4) Sportsmanship: Fulfilling duties enthusiastically without complaining against the difficulties and problems encountered in the organization; 5) Civic Virtue: is expressed as the active and voluntary participation to the organizational activities and life by keeping the interests of the organization at the highest level.

Organizational citizenship behavior plays a critical role for schools to be effective and successful. (DiPaola and Tschannen-Moran, 2001: 425; DiPaola and Hoy, 2005: 37). In schools with organizational citizenship behaviors, teachers continuously develop themselves personally and professionally to be able to be more helpful to the students and to achieve the objectives of the school more effectively and rapidly (DiPaola and Hoy, 2005: 38); pay attention for course hours to be efficient, make an effort for courses, programs and social activities to be more quality and efficient in the school, offer ideas and suggestions related to this (Allison et al., 2001: 287). Teachers in this kind of school support their teacher colleagues voluntarily, even if not within their job descriptions formally, take care of students even at breaks and outside school hours (Nguni et al., 2006: 171 as cited in Avcı, 2015d: 11). Such organizational citizenship behaviors exhibited in educational institutions support the personal, academic and social developments of the students by creating an efficient and effective education and training environment, and also prepare the environment required for raising more successful and happy students (DiPaola and Tschannen-Moran, 2001: 441; DiPaola and Hoy, 2005: 42; Bogler and Somech,

2005: 430 as cited in Avcı, 2015f: 16).

According to Boone and Kurtz (2013: 255), an institution is as good as its employees. According to this conception, workers should be supported so as to exhibit more effective, participatory behaviors independent of the formal reward system. At this point, organizational citizenship behaviors are the most interesting concepts (Celep et al., 2005: 1; Koçel, 2013: 668; Erşahan, 2011: 153). This situation is exactly valid for educational organizations. Indeed, many studies have been carried out regarding the organizational citizenship behaviors and the variables that are associated with this concept: Organizational citizenship behaviors and school climate (DiPaola and Tschannen-Moran, 2001), organizational citizenship behaviors with school and career success of students (Allison et al., 2001), organizational citizenship behaviors and student achievements and success (DiPaola and Hoy, 2005; Burns and Carpenter, 2008), organizational citizenship behaviors and teacher attitudes (Bogler and Somech, 2005 as cited in Avcı, 2016: 319).

Many studies and researches have been made regarding the organizational citizenship behaviors and the associated variables in educational institutions within the country: Organizational citizenship behaviors and organizational health (Buluç, 2008), organizational citizenship behaviors and educational organizations (Sezgin, 2005; Acar, 2006), organizational citizenship behaviors and organizational learning (Taşçı and Koç, 2007), organizational citizenship behaviors, organizational commitment and burnout (Celep et al., 2005), organizational citizenship behaviors and organizational trust (Yücel and Samancı-Kalaycı, 2009), organizational citizenship behaviors and student success (2003), organizational citizenship behaviors and organizational justice (Taştan and Yılmaz, 2008), organizational citizenship behaviors and teacher opinions (Titrek et al., 2009; Çetin et al., 2003; Yılmaz, 2010), organizational citizenship behaviors, organizational justice and organizational trust (Baş and Şentürk, 2011; Polat and Celep, 2008), organizational citizenship behaviors and personality characteristics of teachers (Yücel and Kaynak-Taşçı, 2007).

Leadership styles and organizational citizenship behaviors

Along with all these, interest in the relationship of leadership and organizational citizenship behaviors has gradually increased, especially in recent times. The increasingly competitive conditions, along with the globalization, have significantly increased the importance of leadership styles to achieve more efficient and effective management of the institutions, and promote organizational citizenship behaviors for employees who will, consequentially, work more and make sacrifices for the objectives of the organization by exerting extra effort. There are many studies revealing the relationship

between leadership styles and organizational citizenship (Podsakoff et al., 1996; Purvanova et al., 2006). The majority of these studies show that positive leadership behaviors contribute to the development of organizational citizenship behaviors (Smith et al., 1983; Podsakoff et al., 1990; Piccolo and Colquitt, 2006). In particular, studies and researches about transformational leadership and organizational citizenship behaviors have an important place in literature: Transformational leadership and organizational citizenship performance (Purvanova et al., 2006), transformational leader behaviors and trust in leader, job satisfaction and organizational citizenship behaviors (Podsakoff et al., 1990), transformational leader behaviors and job satisfaction, organizational trust and organizational citizenship behaviors (Podsakoff et al., 1990), transformational leader behaviors, job performance and organizational citizenship behaviors (Piccolo and Colquitt, 2006), leader-member exchange and organizational citizenship behaviors (Deluga, 1994). There are also studies including the relationship of leadership and organizational citizenship behaviors within the country: transformational leadership, organizational citizenship behavior and organizational justice (Arslantaş and Pekdemir, 2007), charismatic leadership and organizational citizenship behaviors (Aslan, 2009), empowering leader behavior and organizational citizenship behaviors (Bolat et al., 2009).

There are also important research and studies examining the leadership styles, organizational citizenship behaviors and teachers' attitudes in educational institutions: transformational and transactional leadership with organizational commitment and organizational citizenship behaviors (Nguni et al., 2006), transformational leadership, teacher behaviors and student success (Koh et al., 1995), leadership styles, teacher behaviors and job satisfaction (Bogler, 2001), transformational leadership, teacher and student behaviors (Leithwood and Jantazi, 2006), transformational leadership, teacher performance and commitment (Geijssel et al., 2003), transformational leadership, restructuring of the school and elimination of teacher burnout (Leithwood et al., 1996), instructional leadership and development of teachers (Blase and Blase, 1999), leadership, teachers' professionalization, organizational cohesion and trust (Tschannen-Moran, 2009). There are also a few, studies that include leadership and organizational citizenship behaviors in educational institutions within the country: leadership styles and organizational citizenship behaviors (Oğuz, 2011), manager's support and organizational citizenship behaviors (Özdemir, 2010).

Purpose and importance of the research

In this study, the relationship between school principals' transformational and transactional leadership styles and organizational citizenship behaviors according to the perceptions of teachers is investigated. Through this

research, an attempt to explain the leadership styles school principals, from the viewpoints of teachers, and how these leadership styles predict the organizational citizenship behaviors that are evident. The research results are important for revealing data on which leadership styles school principals have; the determination of how leadership styles affect the organizational citizenship behavior in school; the establishment of an efficient education and training system with a healthy school management; and the development of organizational citizenship behaviors with positive leadership characteristics.

When domestic sources in the literature are analyzed and these are compared with international exemplar studies, the relationship of leadership and organizational citizenship behaviors in educational institutions in the country that is the subject of this study will be seen to be quite limited. However, as it is noted, leadership styles of school principals and organizational citizenship behaviors exhibited by teachers have vital importance in the achievement of the objectives of education and training system and revealing a healthy school climate. Therefore, the lack of studies on this topic is a major deficiency for the education and training system in this country. This study was carried out to contribute to the literature regarding such an important issue.

In the light of this information, the main purpose of the research is to investigate the relationship between leadership styles of school principals and the organizational citizenship behaviors exhibited by teachers according to the perceptions of these teachers. The main question of the research: What is the level of the relationship between leadership styles of school principals and the organizational citizenship behaviors exhibited by teachers according to the perceptions of teachers, and how leadership styles predict the organizational citizenship behaviors? Answers were sought for the following questions within the frame of the research (sub-problems-objectives): What are the leadership styles and levels of school principals according to the teachers' perceptions? What are the organizational citizenship behaviors and levels of teachers? What are the effect and level of the leadership styles of school principals on organizational citizenship behaviors according to the teachers' perceptions?

METHODOLOGY

Research model

This research is both a descriptive study (qualitative) and a quantitative investigation into the effect of leadership styles of school principals on organizational citizenship behaviors according to the teachers' perceptions. The relational screening model was used in the research. The screening model is a research approach aiming to indicate a situation which is in the past or is existing currently. The event, person or object discussed in the research is defined by conditions and no attempt to change made to change these conditions (Karasar, 2007: 77). The relational screening

models are research models aiming to determine the presence or degree of the change between two or more number of variables (Karasar, 2007: 81). The independent variable of this research, which was carried out to investigate whether leadership styles of school principals have effect on organizational citizenship, is the leadership styles of school principals, and the dependent variable is the organizational citizenship behaviors.

Population and sample of the research

Teachers working in public and private schools of Ministry of National Education within the borders of Kadıköy district of İstanbul province in 2014 constituted the population of the research. The research population consists of 4785 teachers. A web-based, unique Survey Information Management System (SIMS) was developed for the research. Owing to the facilities and opportunities provided by this system, a complete inventory sampling model was used to reach all of the schools in the district. A complete inventory sampling model requires the collection data from all units of the target audience related to research (Şenol, 2012: 35). The data of 1723 teachers with the necessary qualifications were used in the research. 496 (28.8%) of 1723 people were females, and 1227 (71.2%) of them were males. A total of 582 (33.8%) people consisting of 171 (9.9%) females and 411 (23.9%) males from the state elementary school, a total of 375 (21.8%) people consisting of 99 (5.7%) females and 276 (16.0%) males from the state secondary school, a total of 321 (18.6%) people consisting of 138 (8.0%) females and 183 (10.6%) males from the state high school, a total of 137 (18.6%) people consisting of 14 (8.0%) females and 123 (7.1%) males from the private elementary school, a total of 166 (9.6%) people consisting of 30 (1.7%) females and 136 (7.9%) males from the private secondary school, and a total of 142 (8.2%) people consisting of 44 (2.6%) females and 98 (5.7%) males from the private high school participated in the research. The number of males participating in the research is more than females, and likewise the number of those participating in the research from the government institutions is more than the number of those participating in the research from the private institutions.

Data collection and analysis

The data in this research were collected by the "Effect of Leadership Styles of School Managers on Organizational Citizenship" inventory consisting of a "Personal Information Form", a "Leadership Styles Scale" and an "Organizational Citizenship Scale" developed by the researcher. The input of the data obtained from the participants was made via SPSS 17.0, and the research data were analyzed by "mean", "standard deviation", "Pearson moment correlation coefficient" and "regression analysis".

Personal information form

The closed-ended questions addressing the individual and professional characteristics of teachers within the scope of application were included in the Personal Information Form.

Leadership styles scale

Firstly, the review of literature was performed to determine the general framework of the scale and to create a measurement tool in accordance with the objectives of the research. In this context, subject headings, sub-dimensions, content, style and format of questions regarding the scale which was desired to develop were analyzed by reaching the domestic and international sources and

researches. The raw form was created based on the most prominent characteristics regarding the dimensions of leadership styles because it was not possible to separate the dimensions of leadership styles by certain boundaries. The scale form was reduced to have 82 questions by eliminating some questions within the frame of the analyses and evaluations carried out and the opinions and suggestions received from educational managers and teachers. An 82-question form was examined by three faculty members who are experts in the field of educational management, two experts who graduated from Department of Turkish Language and Literature and a Turkish teacher, and the number of questions was reduced to 71. Then, the scale was applied to 30 teachers to determine whether there was any question which was incomprehensible or difficult to understand. As a result of this application, the scale was reduced to 67 questions in accordance with the teachers' opinions and suggestions. The sample items regarding the dimensions of the leadership styles scale are shown in Table 1.

The leadership styles scale was designed as 5 point likert scale and scored as strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5) (Tavşancıl, 2006). Due to the fact that answers representing the points of minimum 1 and maximum 5 were given to the questions and a total of one index was formed, grading was performed as following starting from 1 in the point range of $4/5 = .80$: 1) $1.00 - 1.80 =$ Very low level; 2) $1.81 - 2.60 =$ Low level; 3) $2.61 - 3.40 =$ Medium level; 4) $3.41 - 4.20 =$ High level; 5) $4.21 - 5.00 =$ Very high level (İslamoğlu and Alnıaçık, 2013).

By receiving expert opinions to ensure the scope and the evident validity of the scale, the validity was examined to analyze which characteristics was measured by the scope and scale to represent the subjects that judgment items aimed to measure evenly (Tavşancıl, 2006: 35). The exploratory factor analysis was carried out to ensure the validity of the scale and to form the subscales. Factor analysis is a statistical technique which aims to measure by bringing together the variables that measure the same structure or the quality, and to explain with few factors (Tavşancıl, 2006; Özdemir, 2013). The criteria regarding the fact that items to be included in each factor would be consistent in terms of meaning and content, factor eigenvalues would be 1 or above 1, and an item would have a factor load of ".40" and more in the factor it would be included were taken into consideration while performing the exploratory factor analysis (İra and Şahin, 2011; Büyüköztürk, 2002). The SPSS 17.0 program was used in the analysis of data, the arithmetic mean, percentage, KMO, Bartlett test, factor analysis and reliability analyses were performed. The construct validity of the scale was tested by factor analysis, and its internal consistency was tested by Cronbach's alpha reliability coefficient. The pre-assessment of the scale was performed by applying the scale to 150 teachers who were willing and eager on this subject. As a result of this application, the overall Cronbach's α coefficient of the leadership styles scale was found to be 0.986, the Cronbach's α coefficient of transformational leadership was found to be 0.990, and the Cronbach's α coefficient of transactional leadership was found to be 0.826. To conform with the protocol in relation to the factor analysis, the adequacy of the data was investigated with Kaiser-Meyer-Olkin (KMO test), and the fact that data come from the multivariate normal distribution was investigated with Barlett Test of Sphericity. The fact that the value found as a result of the KMO test gets close to 1 is evaluated as perfect, where, if it remains below 0.50 it is evaluated as unacceptable, and the fact that Barlett Test is significant shows the significance level of the data (Tavşancıl, 2006). As a result of the analysis: 1) Leadership styles scale KMO value 0.926 and Barlett Test of Sphericity (p : 0.000) were found to be significant. 2) Transformational leadership styles scale KMO value 0.906 and Barlett Test of Sphericity (p : 0.000) were found to be significant. 3) Transactional leadership styles scale KMO value 0.773 and Barlett Test of Sphericity (p : 0.000) were found to be significant. These results obtained show

that there was sufficient correlations between items to be able to perform factor analysis (Büyüköztürk, 2002).

The Principal Component Analysis Method and Varimax Rotation were used to determine the construct validity of the scale (İra and Şahin, 2011; Gülbahar and Büyüköztürk, 2008; Usluel and Vural, 2009; Kılıçer and Odabaşı, 2010). As a result of the factor analysis carried out, the factor loads of the items resulted between 421 and 795. The factor loads of the items in the scale are above the desired level (Şanslı, 2012; Özdemir, 2013; İslamoğlu and Alnıaçık, 2013). As a result of the analysis, a 10-factor structure that explained 76.42% of the total variance and had an eigenvalue of above 1.00 was obtained. These factors were evaluated in two sub-categories including transformational leadership (8 sub-dimensions) and transactional leadership (2 sub-dimensions) in accordance with the literature (Bass, 1997a; Bass and Avolio, 1993). The data regarding the leadership styles scale which was obtained as a result of the application of the leadership styles scale to the target audience, the sub-dimensions of the scale, reliability values, variances and eigenvalues are shown in Table 2:

Organizational citizenship behaviors scale

The subject headings, sub-dimensions, content, style and format of questions regarding the scale which was desired to develop were analyzed by reaching the domestic and international sources and researches. The raw form was created based on the most prominent characteristics regarding the dimensions of organizational citizenship behaviors because it was not possible to separate the dimensions of organizational citizenship behaviors by certain boundaries. The scale form was reduced to have 109 questions by eliminating some questions within the frame of the analyses and evaluations carried out and the opinions and suggestions received from educational managers and teachers. 109-question form was examined by three faculty members who are experts in the field of educational management, two experts who graduated from Department of Turkish Language and Literature and a Turkish teacher, and the number of questions was reduced to 92. Then, the scale was applied to 30 teachers to determine whether there was any question which was incomprehensible or difficult to understand. As a result of this application, the scale was reduced to 88 questions in accordance with the teachers' opinions and suggestions. The sample items regarding the dimensions of the organizational citizenship behaviors scale are given in Table 3.

Similar steps in the leadership styles scale were followed and applications were carried out while developing the organizational citizenship behaviors scale. The five point likert scale was used in the organizational citizenship behaviors scale (Tavşancıl, 2006), and the required index was created by the question scoring ranging between 1 and 5 (İslamoğlu and Alnıaçık, 2013). The expert opinions were received to ensure the scope and the face validity of the scale (Tavşancıl, 2006: 35); the exploratory factor analysis was carried out to ensure construct validity and to form the subscales (Tavşancıl, 2006; Özdemir, 2013; İra and Şahin, 2011; Büyüköztürk, 2002). SPSS 17.0 program was used in the analysis of data, the arithmetic mean, percentage, KMO, Bartlett test, factor analysis and reliability analyses were performed. The construct validity of the scale was tested by factor analysis, and its internal consistency was tested by Cronbach's alpha reliability coefficient. The pre-assessment of the scale was performed by applying the scale to 150 teachers who were willing and eager in relation to this subject. As a result of this application, reliability of organizational citizenship behavior scale Cronbach's α coefficient was found to be .949. In conformance with the data to the factor analysis, the adequacy of the data was investigated with KMO test, and the fact that data come from the multivariate normal distribution was investigated with Barlett Test of Sphericity (Tavşancıl, 2006). As a result of the analysis, KMO value 0.953 and Barlett Test of Sphericity (p : 0.000)

Table 1. Sample items regarding the dimensions of the leadership styles scale.

Sample items regarding the dimensions of the transformational leadership scale
<p>1. Having Positive Personality Characteristics My manager has high self-confidence. My manager is helpful.</p>
<p>2. Setting an objective My manager has applicable objectives. My manager does strategic planning in line with the objectives set.</p>
<p>3. Being Innovative and Entrepreneurial My manager can rapidly adapt to the innovation and changes required by the time. My manager supports new ideas.</p>
<p>4. Working Effectively and Having Business Culture My manager is a model for the employees in terms of personal and institutional aspects. My manager works depending on the institution's mission and values.</p>
<p>5. Establishing Effective Communication My manager shows that he values employees while communicating with them. My manager carefully listens to the answerer.</p>
<p>6. Giving Importance to the Individual and Motivation My manager treats employees by considering individual differences. My manager rapidly appreciates the successful efforts and rewards when needed.</p>
<p>7. Giving Importance to Team-Team Work My manager includes those people with whom he works into the management process. My manager makes an effort for the formation of unity and solidarity among employees.</p>
<p>8. Solving Problems My manager does not give sudden and impulsive decisions related to the problems encountered. My manager gives confidence to the group by maintaining his calmness against problems.</p>
<p>Sample items regarding the dimensions of the transactional leadership scale</p>
<p>1. Management with exceptions My manager does not intervene in the management unless it is necessary. My manager intervenes in processes when things go wrong or standards are not met.</p>
<p>2. Conditional rewarding My manager gives clear information about the rewards and punishments that employees will receive in achieving or failure to achieve the objectives. My manager performs rewarding and punishing within the framework of the rules established.</p>

were found to be significant. This shows that there was sufficient correlations between items (Büyüköztürk, 2002) to be able to perform factor analysis. Principal Component Analysis Method and Varimax Rotation were used to determine the construct validity of the scale (İra and Şahin, 2011; Gülbahar and Büyüköztürk, 2008; Usluel and Vural, 2009; Kılıçer and Odabaşı, 2010). As a result of the factor analysis, the factor loads of the items resulted between 457 and 835. The factor loads of the items in the scale are above the desired level (Şanslı, 2012; Özdemir, 2013; İslamoğlu and

Alnıaçık, 2013). As a result of the analysis, a 9-factor structure that explained 73.91% of the total variance and had an eigenvalue of above 1.00 was obtained. These factors were evaluated in 9 sub-dimensions in accordance with the literature (Bateman and Organ, 1983; Podsakoff et al., 1997; DiPaola and Tschannen-Moran, 2001; DiPaola and Hoy, 2005). The data regarding the organizational citizenship behavior scale which was obtained as a result of the application of the organizational citizenship behavior scale to the target audience, the sub-dimensions of the scale, reliability values,

Table 2. Dimensions, number of items, Cronbach's Alpha values, explained variance values and Eigenvalues of the leadership styles scale.

Transformational leadership	Number of items	Number of items found in the scale	Cronbach's Alpha	Explained variance	Eigen value
Factors of the transformational leadership scale					
1. Having positive personality characteristics	8	1 - 11 - 27 - 29 - 43 - 44 - 52 - 54	0.989	6.31	2.20
2. Setting an objective	6	4 - 13 - 23 - 47 - 49 - 53	0.983	2.79	1.62
3. Being innovative and entrepreneurial	9	3 - 8 - 10 - 17 - 21 - 22 - 24 - 26 - 42	0.988	19.91	8.40
4. Working effectively and having business culture	10	2 - 5 - 9 - 20 - 36 - 40 - 45 - 48 - 50 - 56	0.986	29.52	38.63
5. Establishing effective communication	6	6 - 14 - 18 - 28 - 32 - 46	0.986	2.44	1.45
6. Giving importance to the individual and motivation	6	7 - 12 - 19 - 30 - 34 - 55	0.985	2.73	1.53
7. Giving importance to team-team work	6	15 - 33 - 35 - 38 - 51 - 57	0.983	4.46	1.84
8. Solving problems	6	16 - 25 - 31 - 39 - 37 - 41	0.982	4.65	2.09
Total	57		0.990	72.81	-
Transactional leadership					
Factors of the transactional leadership scale					
1. Management with exceptions	4	58 - 65 - 66 - 67	0.771	1.89	1.43
2. Conditional rewarding	6	59 - 60 - 61 - 62 - 63 - 64	0.772	1.72	1.38
Total	10	-	0.826	3.61	-
General leadership styles scale	67	-	0.986	76.42	-

Table 3. Sample items regarding the dimensions of the organizational citizenship behaviors scale.

Sample items regarding the dimensions of the organizational citizenship behaviors scale
1. Institutional Identification
The vision, mission and values of my institution are important for me.
There is a strong bond between my institution and me.
2. Sense of Duty and Responsibility
I completely fulfill my duties and responsibilities for the success of my institution.
I make use of working hours in the most efficient way, I do not waste time.
3. Helpfulness
When someone asks me for help, I gladly fulfill it.
I help beginners about adaptation to the institution.
4. Administrative Contribution
I try to support the management processes with new ideas and suggestions.

Table 3. Cont'd

I support the management for the continuation of unity and solidarity and avoiding damage to the positive atmosphere in the institution.

5. Sacrifice

I will be happy to work additionally for the success of the institution.

When my personal preferences are confronted with the interests of the institution, I act in accordance with the interests of the institution by sacrificing my personal preferences.

6. Being Thoughtful and Compatible

I know that being thoughtful and compatible is important in institutional success.

I avoid attitudes and behaviors that will damage the working atmosphere.

7. Move with Team Spirit

I try to fulfill works and duties with the understanding of team spirit.

I try to act in unity and solidarity with all employees in the institution.

8. Positive Communication and Interaction

I am always careful to be positive and compatible in relationships I establish with my environment.

I try to create a compromising environment which is far from the conflict in the institution.

9. Personal and Institutional Development

I know that the more I develop myself, the more I will contribute to my institution.

I fondly participate in in-service trainings courses and programs organized for the individual and institutional development.

variances and eigenvalues are shown in Table 4.

FINDINGS

The perception of average of teachers participating in the research regarding the transformational and transactional leadership characteristics of school principals and the average of exhibiting organizational citizenship behaviors is high. There is a positive highly significant relationship between the transformational and transactional leadership characteristics and organizational citizenship behaviors of school principals. Transformational leadership affects the level of organizational

citizenship more positively compared to transactional leadership. The results obtained from the statistical analyses carried out in accordance with the research problem are shown in tables.

The perception levels of teachers regarding the leadership styles of school managers are seen in Table 5.

The perception average of teachers regarding the transformational leadership is (\bar{X} = 3.94), their perception average regarding the transactional leadership is (\bar{X} = 3.77), their perception average regarding the general leadership styles scale is

(\bar{X} = 3.92); and the answers given to the items in the scale vary between the highest (\bar{X} = 4.11) and the lowest (\bar{X} = 3.61). Teachers' perceptions on the general leadership, transformational and transactional leadership of the school principals are high.

The perception levels of teachers regarding the organizational citizenship behaviors are seen in Table 6.

Teachers' average of exhibiting organizational citizenship behavior is (\bar{X} = 4.36), and the answers given to the items in the scale vary between the

Table 4. Dimensions, number of items, Cronbach's alpha values, explained variance values and Eigen values of the organizational citizenship scale.

Organizational citizenship behaviors scale					
Sub-dimensions of the organizational citizenship behaviors scale	Number of Items	Number of items found in the scale	Cronbach's alpha	Explained variance	Eigen value
1. Institutional identification	18	68 - 75 - 87 - 90 - 94 - 99 - 103 - 106 - 116 -122 -126 - 129 - 131 - 135 - 138 - 142 - 146 - 152	0.981	20.44	8.39
2. Sense of duty and responsibility	22	70 - 77 - 81 - 84 - 86 - 95 - 100 - 104 - 109 - 112 - 120 - 125 - 128 - 130 - 134 - 136 - 140 - 143 - 145 - 149 - 151 - 155	0.985	31.20	17.68
3. Helpfulness	7	71 - 78 - 82 - 96 - 108 - 110 - 118	0.951	1.20	1.67
4. Administrative contribution	4	72 - 80 - 111 - 115	0.943	1.39	1.78
5. Sacrifice	4	73 - 79 - 113 - 119	0.951	1.95	1.90
6. Being thoughtful and compatible	10	74 - 83 - 89 - 92 - 98 - 102 - 114 - 121 - 123 - 154	0.984	6.06	2.47
7. Move with team spirit	8	88 - 93 - 105 - 117 - 132 - 133 - 144 - 150	0.971	7.57	2.93
8. Positive communication and interaction	7	76 - 85 - 107 - 124 - 127 - 141 - 153	0.946	1.74	1.88
9. Personal and institutional development	8	69 - 91 - 97 - 101 - 137 - 139 - 147 - 148	0.950	2.36	2.14
Total	88	-	0.949	73.91	-

Table 5. Perception levels of teachers regarding the leadership styles of school managers.

Leadership styles	\bar{X}	S
Transformational leadership	3.94	61.91
Transactional leadership	3.77	9.80
General leadership styles scale	3.92	70.42

Table 6. Perception levels of teachers regarding the organizational citizenship behaviors.

Organizational citizenship behaviors	\bar{X}	S
Organizational citizenship behaviors	4.36	73.65

highest (\bar{X} = 4.54) and the lowest (\bar{X} = 3.96). Teachers' average of exhibiting organizational citizenship behavior is high.

The relationship between the leadership styles

and the organizational citizenship behaviors of school principals according to teachers' perceptions is shown in Table 7.

According to the Pearson correlation analysis carried out to determine the degree and direction

of the relationship between the variables, there was a significant positive relationship between Leadership styles and its sub-dimensions and the organizational citizenship behaviors. There was a strong, positive and significant relationship

Table 7. Pearson correlation analysis explaining the relationship between the leadership styles and the organizational citizenship.

Leadership styles and organizational citizenship behaviors pearson correlation analysis results	Transformational leadership general	Having positive personality characteristics	Setting an objective	Being innovative and entrepreneurial	Working effectively and having business culture	Establishing effective communication	Giving importance to the individual and motivation	Giving importance to team-team work	Solving problems	Transactional leadership general	Management with exceptions	Conditional rewarding	Organizational citizenship behaviors
Organizational citizenship behaviors	0.644*	0.631*	0.643*	0.644*	0.632*	0.635*	0.641*	0.642*	0.629*	0.616*	0.511*	0.607*	1.000*

*P < .05.

between the transformational leadership and the organizational citizenship behavior ($r=0.644$, $p<0.05$). There are relationships between the transformational leadership sub-dimensions and organizational citizenship behavior; these are; (1) Having Positive Personality Characteristics ($r=0.631$, $p<0.05$), (2) Setting an objective ($r=0.643$, $p<0.05$), (3) Being Innovative and Entrepreneurial ($r=0.644$, $p<0.05$), (4) Working Effectively and Having Business Culture ($r=0.632$, $p<0.05$), (5) Establishing Effective Communication ($r=0.635$, $p<0.05$), (6) Giving Importance to the Individual and Motivation ($r=0.641$, $p<0.05$), (7) Giving Importance to Team-Team Work ($r=0.642$, $p<0.05$), (8) Solving Problems ($r=0.629$, $p<0.05$). These data show us that there are also strong, positive and significant relationships between the transformational leadership sub-dimensions and the organizational citizenship behavior. The strongest relationship between dimensions is the 3rd Dimension-Being Innovative and Entrepreneurial ($r=0.644$, $p<0.05$); the lowest relationship is 8th Dimension-Solving Problems ($r=0.629$, $p<0.05$). There is a lower but strong positively significant relationship transactional leadership and organizational citizenship behavior ($r=0.616$, $p<0.05$) compared to transformational leadership. Between the sub-dimensions of transactional leadership and organizational citizenship behavior, there is; a strong

positively significant relationship in the 1st Dimension-Management with exceptions ($r=0.511$, $p<0.05$), a strong positively significant relationship in the 2nd Dimension – Conditional rewarding ($r=0.607$, $p<0.05$). When relationship values are examined, it is seen that all of these values are lower than transformational leadership and sub-dimensions. Hence, it can be concluded that transformational leadership and its sub-dimensions affect organizational citizenship behavior more positively and significantly compared to transactional leadership and its sub-dimensions. Increasing the transformational leadership characteristics of school principals will further affect organizational citizenship behavior in school to be robust and strong.

The regression analysis regarding the fact that leadership styles of school principals predict the organizational citizenship behaviors according to teachers' perceptions is seen in Table 8.

The regression model established is significant because the significance level is $p<0.05$. According to the results of the analysis carried out for the prediction of the relationship, it was seen that there was positively moderate significant relationship between leadership styles and organizational citizenship behavior. R^2 value which is stated as the explanatory power of the model was calculated as 0.429 ($R=0.655$; $R^2=0.429$; $p<0.05$).

Table 8. Regression analysis regarding the fact that leadership styles predict the organizational citizenship.

Model	B	Std. Error	β	t	p
Transformational leadership	0.438	0.438	0.360	12.142	0.00
Transactional leadership	1.397	0.238	0.212	6.595	0.00

R = 0.655, R² = 0.429, F = 645.958. p < 0.05. ^aIndependent Variable: Leadership Styles (Transformational Leadership - Transactional Leadership). ^bDependent Variable: Organizational Citizenship.

This value shows that 43% of organizational citizenship variable (variance) was explained by the independent variables in the model, that is, leadership styles. For the independent variables included in the regression model; Transformational Leadership Beta coefficient= 0.360; Transactional Leadership Beta coefficient= 0.212 (p<0.05). Accordingly, Transformational Leadership and Transactional Leadership are p<0.05, they have a significant effect on organizational citizenship behavior. These coefficients can be interpreted as follows: a one-unit increase in transformational leadership causes a 0.360-unit increase on organizational citizenship behavior when the effect other variables in the model are fixed (Because the sign of the standardized beta coefficient is positive and p<0.05). Similarly, a one-unit increase in transactional leadership causes a 0.212-unit increase on organizational citizenship behavior (Because the sign of the standardized beta coefficient is positive and p<0.05).

DISCUSSION

This research was carried out to determine the relationship between the transformational and transactional leadership characteristics of school principals and teachers' organizational citizenship behaviors according to the teachers' perceptions. According to the result of this research, the perception averages of teachers regarding the general leadership styles of the school principals, both for the transformational leadership and the transactional leadership is high. These results concur with the research results of Oğuz (2011), Şahin (2005, 2011), Buluç (2009), Tahaoğlu and Gedikoğlu (2009), Cerit (2008), Ceylan et al. (2005), Cemaloğlu (2007a), Ergin and Kozan (2004), Çelik and Eryılmaz (2006) and Akbaba-Altun (2003). This situation is quite important for the education and training system in Turkey. Since the research findings support the assertion that the leadership skills and capacity of school principals are perceived to be very important, these will strongly support the current training and education activities in schools, will contribute to the formation of a healthy school climate and should have a consequential positive effect upon the student success (Şahin, 2011c: 131). There are significant connections between the transformational leadership and transactional leadership with structures and the success or failure of institutions (Şahin, 2005: 46). Transformational leadership and transactional leadership have

separate effects on institutional structures and institutional culture (Tahaoğlu and Gedikoğlu, 2009: 293). The stronger the transformational leadership characteristics of school principals are, the higher organizational trust, commitment exhibited by teachers (Buluç, 2009: 26), organizational citizenship behavior (Oğuz, 2011: 395), job satisfaction (Yılmaz and Ceylan, 2011: 291); positive and healthy organizational structure, climate and culture (Şahin, 2004b: 383; Şahin, 2010: 566; Şahin, 2011: 1919; Korkmaz, 2005: 412; Cemaloğlu, 2007a: 83; Koşar and Çalık, 2011: 596), learning and constantly self-improving organization characteristics (Arslan and Uslu, 2014: 351; Korkmaz, 2008: 91) and performance and success indices of the organization (Korkmaz, 2006: 520) are.

Based on all these research results, it is evident that the leadership characteristics of school principals directly and very significantly affect the organizational trust, commitment and citizenship felt in the school especially those working in the school, school culture and climate and the quality of education and training. The personal and professional characteristics of the school principals, the communication and management styles they use significantly determine the material and spiritual characteristics of the school and the physical and psychological structure of all staff in the school. The leadership characteristics of school principles are evidently a source of inspiration for teachers that serves to guide and inspire them.

Besides this, the research findings support the assertion that the leadership characteristics of school principals are the driving force of institutional change and provide the means to solve the problems in the fastest and most efficient way. The leadership characteristics of successful and effective school principals bring together all material and spiritual elements of the school like cement and these form a coherence and integrity for the learning community. The transformational leadership style exhibited by school principals working in educational institutions positively affects the school and all related stakeholders. This situation is positively reflected on teachers and employees and supports the success of education and training.

According to these research results, teachers' capacity to exhibit organizational citizenship behavior is strong, when they are well led. This result shows similarity with the research results of Oğuz (2011), Polat and Celep (2008), Özdevicioğlu (2003), Taştan and Yılmaz (2008), Buluç (2008), Akyüz (2012), Arlı (2011), Yıldırım (2012),

Polat (2009), Korkmaz (2011) and Dilek (2005). The high level of organizational citizenship behavior in institutions is extremely important and necessary for institutional success and productivity (Konovsky and Organ, 1996; MacKeinzce et al., 1998).

The organizational citizenship behaviors exhibited in educational institutions positively affect the healthy functioning and success of the institutions (Avcı, 2015f; 19). When viewed from this aspect, the importance and necessity of promoting and increasing organizational citizenship behaviors in educational institutions for more productive education system becomes clear, in order to work towards increasing the quality of education and for the establishment of quality and success-oriented school culture (Çetin et al., 2003; Özdevecioğlu, 2003; Sezgin, 2005; Polat and Celep, 2008; Buluç, 2008; Yılmaz and Taşdan, 2009; Titrek et al., 2009; Yılmaz, 2009).

However, with all these, it should not be forgotten that leadership is very important for the creation of a healthy education and training climate in educational institutions. Because school management and leaders are key determinants in establishing and maintaining the organizational citizenship and the positive organizational culture in institutions (Oğuz, 2011), establishing organizational citizenship behaviors in institutions is not easy without effective leadership of the school principal and school management, and likewise the continuation of the established organizational citizenship behaviors seems impossible. When the issue is considered from this point of view, effective leadership is virtually the locomotive, guide, director and the shaper of organizational citizenship behaviors (Arslantaş and Pekdemir, 2007; Bolat et al., 2009; Aslan, 2009; Oğuz, 2011). The job satisfaction, leader support, organizational justice, organizational trust, organizational commitment, positive organizational culture and positive organizational communication in institutions make significant contributions to the formation and sustainability of organizational citizenship behaviors (Smith et al., 1983; Organ and Ryan, 1995; Konovsky and Organ, 1996; Netemeyer et al., 1997; MacKeinzce et al., 1998). These data suggest that all institutions in our country especially educational institutions should better recognize and understand the organizational citizenship behaviors, antecedents and consequences of these behaviors. Nevertheless, these data suggest that the critical role of organizational citizenship behaviors in the success of the institution should be realized and they play a key role on achieving institutional objectives. Along with all these, we see that the main point that should be pointed out that the organizational citizenship behaviors is the importance of the implementation of efficient and effective leadership styles in institutions.

According to this research result, there is a high, positive and significant relationship between the transformational and transactional leadership characteristics of school principals and organizational citizenship behaviors of teachers. Teachers' level of organizational citizenship

behavior increases as their transformational and transactional leadership perceptions increase. The perceived transformational leadership positively affects more organizational citizenship levels compared to transactional leadership. According to the result of the analysis carried out for the prediction of the relationship between the transformational and transactional leadership characteristics of school principals and the organizational citizenship, it is seen that there is a positive and moderate significant relationship between leadership styles and organizational citizenship behavior. R^2 value which is stated as the explanatory power of the model was calculated as 0.429. This value shows that 43% of organizational citizenship variable (variance) was explained by the independent variables in the model, that is, leadership styles. These results show similarity with the research results of Oğuz (2011) examining the transformational and transactional leadership styles and organizational citizenship behaviors, of Arslantaş and Pekdemir (2007) examining the transformational leadership styles and organizational citizenship behaviors, of Aslan (2009) examining the charismatic leadership and organizational citizenship behaviors, of Bolat and Seymen (2009) examining the empowering leadership behaviors and organizational citizenship behaviors, of Nguni et al. (2006) examining the transformational and transactional leadership and organizational citizenship behaviors, of Koh et al. (1995) examining the transformational leadership and teacher behaviors, of Bogler (2001) examining the leadership styles and teacher behaviors, and of Leithwood and Jantazi (2006) examining the transformational leadership and teacher behaviors.

Transformational leadership is vitally important for the accurate guidance and support of teachers who are the most valuable resources of educational institutions, the establishment of organizational citizenship, the creation of a positive organizational culture and the establishment of healthy school climate. Today, leadership and organizational citizenship behavior are the most significant actors in the management of institutions. Leadership ensures the management of the human factor in the institution, and the organizational citizenship behavior ensures the guidance and control of them. The fact that teachers perceive school principals as transformational leaders at high levels directly affects the level of organizational citizenship. The higher the transformational leadership characteristics of school principals are, the higher the level of organizational citizenship behavior exhibited by teachers, the positive and healthy organizational structure and the performance and success indices of the organization are. The opposite of this determination is also true; in other words, the low level perception of the transformational leadership negatively affects the organizational citizenship, decreases the level of organizational citizenship, damages to the positive and healthy organizational structure and reduces the performance and success indices of the organization.

Investigations clearly show that the school principal is the most important factor who can or cannot make school feel peaceful and also who can affect the formation of the desired level of organizational citizenship. From this point of view, it can be concluded that the fact that school principals make an effort to develop their transformational leadership characteristics is very important. The leadership characteristics of school principals directly and very significantly affect the organizational citizenship felt in the school especially those working in the school, school culture and climate and the quality of education and training. The personal and professional characteristics of the school principals, the communication and management styles they use are important determinants in the formation and shaping of the organizational citizenship. Likewise, organizational citizenship behaviors exhibited in the institution will support teachers to be successful and happy, will increase the motivation of teachers, will contribute teachers to love their job and look out for their job, and most importantly will increase teachers' institutional commitment and sense of belonging. Surely, the positive energy that teachers gained from all these positive organizational citizenship factors will be directly reflected on students and will ensure education and training environment to be more productive.

RECOMMENDATION

Based on these determinations, scientific meetings activities and in-service trainings such as management trainings, conferences, seminars and panels that will improve the transformational leadership characteristics of school principals and that will contribute to the creation of a positive organizational culture and the establishment of organizational citizenship behavior should be organized. Likewise, trainings related to student, teacher, parent communication and human psychology for school principals and senior managers should be planned on the basis of district and province and should be repeated periodically. The awareness of managers who are the most important determinant of school climate should consistently be raised on these subjects. School principals should discuss the examples of successful leadership and share their experiences by coming together among themselves. School managers should not give up justice and objectivity in all decisions related to all employees for the formation of strong and healthy organizational citizenship behaviors, should exhibit a fair understanding of management in fulfilling the promises and on issues such as rewarding, promotion and performance evaluation and should make all employees feel that they are equal and important for him and the organization on all occasions. Trainings about the importance of organizational citizenship behaviors and the management styles of school principals and the relationship between them should be provided for teachers. Studies should be

performed in the school for establishing a school environment in which the ideas and suggestions of all employees are taken into account, participation in decision is ensured and a policy open to innovation, development and change is followed for the creation of strong organizational citizenship behaviors.

Conflict of Interests

The author has not declared any conflicts of interest.

REFERENCES

- Acar AZ (2006). Örgütsel yurttaşlık davranışı: Kavramsal gelişimi ile kişisel ve örgütsel etkileri. *Doğuş Üniversitesi Dergisi* 7(1):1-14.
- Akbaba-Altun S (2003). İlköğretim okulu müdürlerinin dönüşümcü liderliğe verdikleri önem ve uygulama düzeyleri. *İlköğretim-Online*. 2(1):10-17.
- Akyüz B (2012). Hizmetkâr liderlik davranışlarının örgütsel adalet, örgütsel vatandaşlık davranışları ve performans üzerine etkisi: Eğitim sektörü üzerine bir araştırma. Doktora tezi. Gebze Yüksek Teknoloji Enstitüsü, Sosyal Bilimler Enstitüsü, Gebze.
- Allison BJ, Voss RS, Dryer S (2001). Student classroom and career success: The role of organizational citizenship behavior. *J. Educ. Bus.* 5-6:282-288.
- Anderson ME (1991). Principals, how to train, recruit, select, induct, and evaluate leaders for America's schools. Unpublished doctoral dissertation, University of Oregon, Eugene.
- Arlı D (2011). Öğretmenlerin örgütsel vatandaşlık davranışlarının örgüt kültürü algıları ve örgütsel güven düzeyleri açısından incelenmesi. Doktora tezi. Ege Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.
- Arslan H, Uslu B (2014). Öğretmen adaylarının öğrenme stilleri ile liderlik yönelimleri arasındaki ilişki. *Eğitim ve Bilim* 39:173.
- Arslantaş CC, Pekdemir I (2007). Dönüşümcü liderlik, örgütsel vatandaşlık davranışı ve örgütsel adalet arasındaki ilişkileri belirlemeye yönelik görgül bir araştırma. *Anadolu Üniversitesi, Sosyal Bilimler Dergisi* 7(1):261-286.
- Aslan Ş (2009). Karizmatik liderlik ve örgütsel vatandaşlık davranışı ilişkisi: "Kurumda çalışma yılı" ve "ücret" değişkenlerinin rolü. *Uluslararası İnsan Bilimleri Dergisi*. 6(1):256-275.
- Avcı A (2015a). The role of leadership and organizational citizenship behaviour in efficient management. *Afr. J. Bus. Manage.* 9(20):717-724.
- Avcı A (2015b). Investigation of transformational and transactional leadership styles of school principals, and evaluation of them in terms of educational administration. *Educ. Res. Rev.* 10(20):2758-2767.
- Avcı A (2015c). Dönüşümcü ve işlemci liderlik stilleri: Kavramsal çerçevesi ve eğitim örgütleri açısından etkileri. *FSM İlimi Araştırmalar İnsan ve Toplum Bilimleri Dergisi (FSM Scholarly Studies J. Humanities Soc. Sci.)* 5:85-108.
- Avcı A (2015d). Öğretmenlerin örgütsel vatandaşlık davranışlarına ilişkin görüşleri. *Eğitim Bilimleri Dergisi. J. Educ. Sci.* 42:1-16.
- Avcı A (2015e). Öğretmen algılarına göre okul müdürlerinin liderlik stilleri. *Hasan Ali Yücel Eğitim Fakültesi Dergisi* 12-2:161-189.
- Avcı A (2015f). Örgütsel vatandaşlık davranışları: Kavramsal gelişimi ve eğitim örgütleri açısından etkileri. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*. 12-2:11-26.
- Avcı A (2016). Investigation of teachers' perceptions of organizational citizenship behavior and their evaluation in terms of educational administration. *Educ. Res. Rev.* 11(7):318-327.
- Avolio BJ, Bass BM, Jung DI (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *J. Occupational Organ. Psychol.* 72:441-462.
- Barnett K, McCormick J, Connors R (1999). Transformational leadership in schools. Panacea, placebo or problem? *J. Educ. Adm.* 39(1):24-46.

- Bass BM (1997a). Does the transactional – transformational leadership paradigm transcend organizational and national boundaries? *Am. Psychol.* 52(2):130-139.
- Bass BM, Avolio BJ (1993). Transformational leadership and organizational culture. *Public Adm. Q.* 17:112-121.
- Bass BM, Steidlmeier P (1999). Ethics, character, and authentic transformational leadership behavior. *Leadersh. Q.* 10(2):181-217.
- Bass BM, Jung DI, Avolio BJ, Berson Y (2003). Predicting unit performance by assessing transformational and transactional leadership. *J. Appl. Psychol.* 88(2):207-218.
- Baş G, Şentürk C (2011). İlköğretim okulu öğretmenlerinin örgütsel adalet, örgütsel vatandaşlık ve örgütsel güven algıları. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 17(1):29-62.
- Bateman TS, Organ DW (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *Acad. Manage. J.* 26(4):587-595.
- Blase J (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educ. Adm. Q.* 35(3):349-378.
- Bogler R (2001). The influence of leadership style on teacher job satisfaction. *Educ. Adm. Q.* 37(5):662-683.
- Bogler R, Somech A (2005). Organizational citizenship behavior in school: How does it relate to participation in decision making? *J. Educ. Adm.* 43(5):420-438.
- Bolat O, Bolat T, Seymen OA (2009). Güçlendirici lider davranışları ve örgütsel vatandaşlık davranışı arasındaki ilişkinin sosyal mübadele kuramından hareketle incelenmesi. *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 12(21):215-239.
- Boone EL, Kurtz DL (2013). *Çağdaş İşletme*. Yalçın, A. (Çev. Ed.). Ankara: Nobel Yayınları.
- Buluç B (2008). Ortaöğretim okullarında örgütsel sağlık ile örgütsel vatandaşlık davranışları arasındaki ilişki. *Türk Eğitim Bilimleri Dergisi.* 6(4):571-602.
- Buluç B (2009a). İlköğretim okullarında bürokratik okul yapısı ile okul müdürlerinin liderlik stilleri arasındaki ilişki. *Eğitim ve Bilim. Educ. Sci.* 34(152):71-86.
- Buluç B (2009b). Sınıf öğretmenlerinin algılarına göre okul müdürlerinin liderlik stilleri ile örgütsel bağlılık arasındaki ilişki. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 15(57):5-34.
- Burns T, Carpenter J (2008). Organizational citizenship and student achievement. *J. Cross-Disciplinary Perspectives in Educ.* 1(1):51-58.
- Büyükköztürk Ş (2002). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Ankara: Pegem Akademi Yayıncılık.
- Celep C, Sarıdede U, Beytekin F (2005). Eğitim örgütlerinde örgütsel bağlılık, örgütsel vatandaşlık davranışı ve tükenmişlik arasındaki ilişki. XIV. Ulusal Eğitim Bilimleri Kongresi Pamukkale Üniversitesi Eğitim Fakültesi 28-30 Eylül 2005 Kongre Cilt Kitabı 1:13-19.
- Cemaloğlu N (2007a). Okul yöneticilerinin liderlik stilleri ile yıldırma arasındaki ilişki. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. J. Educ.* 33:77-87.
- Cemaloğlu N (2007b). Okul yöneticilerinin liderlik stillerinin farklı değişkenler açısından incelenmesi. *Türk Eğitim Bilimleri Dergisi* 5(1):73-112.
- Cerit Y (2008). İlköğretim okulu müdürlerinin hizmet yönelimli liderlik davranışlarının öğretmenlerin tükenmişliklerine etkisi. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 56:547-570.
- Ceylan A, Keskin H, Eren Ş (2005). Dönüşümcü ve etkileşimci liderlik ile örgütsel bağlılık arasındaki ilişkilere yönelik bir araştırma. *Yönetim / İstanbul Üniversitesi İşletme Fakültesi İşletme İktisadi Enstitüsü Dergisi* 16(51):32-42.
- Çelik S, Eryılmaz F (2006). Öğretmen algılarına göre endüstri meslek lisesi müdürlerinin dönüşümcü liderlik düzeyleri (Ankara ili örneği). *Politeknik Dergisi* 9(4):211-224.
- Çetin M, Yeşilbağ Y, Akdağ B (2003). Öğretmenlerin örgütsel vatandaşlık davranışı. *M. Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi* 17:39-54.
- Decker SR (1989). The relationship among principal power tactic usage, leadership style and school climate in selected Iowa elementary schools. Unpublished doctoral dissertation. University of Northern Iowa, Cedar Falls.
- Deluga RJ (1994). Supervisor trust building, leader-member exchange and organizational citizenship behaviour. *J. Occupational Organ. Psychol.* 67:315-326.
- Dilek H (2005). Liderlik tarzlarının ve adalet algısının; örgütsel bağlılık, iş tatmini ve örgütsel vatandaşlık davranışı üzerine etkilerine yönelik bir araştırma. Doktora tezi. Gebze Yüksek Teknoloji Enstitüsü, Sosyal Bilimler Enstitüsü, Gebze.
- DiPaola MF, Hoy WK (2005). Organizational citizenship of faculty and achievement of high school students. *High School J.* 88(3):35-44.
- DiPaola M, Tschannen-Moran M (2001). Organizational citizenship behavior in schools and its relationship to school climate. *J. School Leadersh.* 11(5):424-447.
- Ergin C, Kozan MK (2004). Çalışanların temel değerleri, dönüşümsel ve etkileşimsel liderlerin çekiciliği. *Türk Psikoloji Dergisi* 19(54):37-51.
- Erşahan B (2011). Örgütsel vatandaşlık davranışı. Bakan, İ. (Ed.) *Yönetimde Çağdaş ve Güncel Konular*. Ankara: Gazi Kitabevi.
- Geijsel F, Sleegers P, Leithwood K, Jantzi D (2003). Transformational leadership effects on teachers' commitment and effort toward school reform. *J. Educ. Adm.* 41(3):228-256.
- Greenfield Jr WD (2004). Moral leadership in schools. *J. Educ. Adm.* 42(2):174-196.
- Gülbahar Y, Büyükköztürk Ş (2008). Değerlendirme tercihleri ölçeğinin Türkçeye uyarlanması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi* 35:148-161.
- Hoy WK, Miskel CG (2010). Eğitim yönetimi: Teori, araştırma ve uygulama (Çev. Ed. Turan S.). Ankara: Nobel Yayınları.
- Hoy WK, Tarter CJ (2004). Organizational justice in schools: No justice without trust. *Int. J. Educ. Manage.* 18(4):250-259.
- İra N, Şahin S (2011). Örgüt kültürü ölçeğinin geçerlik ve güvenilirlik çalışması. *Celal Bayar University Journal of Social Sciences (Celal Bayar Üniversitesi Sosyal Bilimler Dergisi)* 9(1):1-14.
- İslamoğlu H, Alıncık Ü (2013). *Sosyal Bilimlerde Araştırma Yöntemleri*. Ankara: Beta Yayınları. 3. Basım.
- Karasar N (2007a). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayınları. 17. Baskı.
- Kılıçer K, Odabaşı HF (2010). Bireysel yenilikçilik ölçeği: Türkçeye uyarlama, geçerlilik ve güvenilirlik çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi* 38:150-164.
- Koçel T (2013). *İşletme yöneticiliği*. İstanbul: Beta Yayınları.
- Koh WL, Steers RM, Terborg JR (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *J. Organ. Behav.* 16(4):319-333.
- Konovsky MA, Organ DW (1996). Dispositional and contextual determinants of organizational citizenship behavior. *J. Organ. Behav.* 17:253-266.
- Korkmaz C (2011). İlköğretim ve ortaöğretim okulları öğretmenlerinin örgütsel vatandaşlık algıları. Yüksek lisans tezi. Fırat Üniversitesi, Eğitim Bilimler Enstitüsü, Elazığ.
- Korkmaz M (2005). Duyguların ve liderlik stillerinin öğretmenlerin performansı üzerinde etkisi. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 43:401-422.
- Korkmaz M (2006). Liderlik uygulamalarının içsel okul değişkenleri ile öğrenci çıktı değişkenlerine etkisi. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 48:503-529.
- Korkmaz M (2008). Okul müdürlerinin liderlik stilleri ile öğrenen örgüt özellikleri arasında ilişki üzerine nicel bir araştırma. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 53:75-98.
- Koşar S, Çalık T (2011). Okul yöneticilerinin yönetimde gücü kullanma stilleri ile örgüt kültürü arasındaki ilişki. *Kuram ve Uygulamada Eğitim Yönetimi* 4:581-603.
- Larsen TJ (1985). Identification of instructional leadership behaviors and the impact of their implementation on academic achievement. Unpublished doctoral dissertation. University of Colorado Boulder, Boulder.
- Leithwood K (1992). Transformational leadership: Where does it stand? *Educ. Digest.* 58(3):17-20.
- Leithwood K, Menzies T, Jantzi D, Leithwood J (1996). School restructuring, transformational leadership and the amelioration of teacher burnout. *Anxiety, Stress and Coping: Int. J.* 9(3):199-215.
- Leithwood K, Jantzi D (2006). Transformational school leadership for

- large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement* 17(2):201-227.
- Lunenborg FC, Ornstein AC (2013). Eğitim yönetimi (Çev. Arastaman, G.). Ankara: Nobel Yayınları.
- MacKenzie BS, Podsakoff MP, Ahearne M (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *J. Market.* 62:87-98.
- MacKenzie SB, Podsakoff PM, Rich GA (2001). Transformational and transactional leadership and salesperson performance. *J. Acad. Market. Sci.* 29(2):115-134.
- Netemeyer GR, Boles SJ, McKee OD, McMurrian R (1997). An investigation into the antecedents of organizational citizenship behaviors in a personel selling context. *J. Market.* 61:85-98.
- Nguni S, Slegers P, Denessen E (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. *School Effectiveness and School Improvement* 17(2):145-177.
- Oğuz E (2011). Öğretmenlerin örgütsel vatandaşlık davranışları ile yöneticilerin liderlik stilleri arasındaki ilişki. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 17(3):377-403.
- Organ DW, Ryan K (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Pers. Psychol.* 48:775-802.
- Özaralli N (2003). Effects of transformational leadership on empowerment and team effectiveness. *Leadership Organ. Dev. J.* 24(6):335-344.
- Özdemir A (2010). İlköğretim okullarında algılanan yönetici desteğinin ve bireycilik - ortaklaşa davranışçılığın örgütsel vatandaşlık davranışı ile ilişkisi. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 16(1):93-112.
- Özdemir A (2013). Yönetim Biliminde İleri Araştırma Yöntemleri ve Uygulamalar. Ankara: Beta Yayınları. 3. Basım.
- Özdemir S, Sezgin F, Kılıç DO (2015). Okul yöneticisi ve öğretmen görüşlerine göre okul yöneticilerinin liderlik yeterlikleri. *Eğitim ve Bilim.* 177:365-383.
- Özdevecioğlu M (2003). Örgütsel vatandaşlık davranışı ile üniversite öğrencilerinin bazı demografik özellikleri ve akademik başarıları arasındaki ilişkilerin belirlenmesine yönelik bir araştırma. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* 20:117-135.
- Piccolo RF, Colquitt JA (2006). Transformational leadership and job behaviours; the mediating role of core job characteristics. *Acad. Manage. J.* 49(2):227-240.
- Podsakoff PM, MacKenzie SB, Bommer WH (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *J. Manage.* 22(2):259-298.
- Podsakoff PM, MacKenzie SB, Moorman RH, Fetter R (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadersh. Q.* 1(2):107-142.
- Podsakoff PM, MacKenzie SB, Paine JB, Bachrach DG (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *J. Manage.* 26(3):513-563.
- Podsakoff PM, Ahearne M, MacKenzie SB (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *J. Appl. Psychol.* 82(2):262-270.
- Polat S (2009). Organizational citizenship behavior (ocb) display levels of the teachers at secondary schools according to the perceptions of the school administrators. *Procedia Soc. Behav. Sci.* 1: 1591-1596.
- Polat S, Celep C (2008). Ortaöğretim öğretmenlerinin örgütsel adalet, örgütsel güven, örgütsel vatandaşlık davranışlarına ilişkin algıları. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 54:307-331.
- Pounder DG, Ogawa RT, Adams EA (1995). Leadership as an organization – wide phenomena: Its impact on school performance. *Educ. Adm. O.* 31(4):564-588.
- Purvanova RK, Bono JE, Dziewieczynski J (2006). Transformational leadership, job characteristics, and organizational citizenship performance. *Hum. Performance* 19(1):1-22.
- Sezgin F (2005). Örgütsel vatandaşlık davranışları: "Kavramsal bir çözümleme ve okul açısından bazı çıkarımlar. *G. Ü, Gazi Eğitim Fakültesi Dergisi* 25(1):317-339.
- Silins H, Mulford B (2004). Schools as learning organisations-effects on teacher leadership and student outcomes. *Schools Effectiveness and Scholl Improvement* 15(3-4):443-466.
- Smith AC, Organ WD, Near PJ (1983). Organizational citizenship behavior: Its nature and antecedents. *J. Appl. Psychol.* 68:653-663.
- Şahin S (2004a). Okul müdürü ve öğretmenler ile okulun bazı özellikleri açısından okul kültürü üzerine bir değerlendirme. *Kuram ve Uygulamada Eğitim Yönetimi* 39:458-474.
- Şahin S (2004b). Okul müdürlerinin dönüşümcü ve sürdürümcü liderlik stilleri ile okul kültürü arasındaki ilişkiler (İzmir ili örneği). *(Educational Sciences: Theory & Practice)* 4(2):365-396.
- Şahin S (2005). İlköğretim okulu müdürlerinin dönüşümcü ve sürdürümcü liderlik stilleri (İzmir İli Örneği). *Eğitim ve Bilim* 30(135):39-49.
- Şahin S (2010). Okul kültürünün bazı değişkenler açısından incelenmesi. *İlköğretim Online (Elementary Education Online).* 9(2):561-575.
- Şahin S (2011a). Öğretimsel liderlik ve okul kültürü arasındaki ilişki (İzmir ili örneği). *Kuram ve Uygulamada Eğitim Bilimleri (Educational Sciences: Theory & Practice)* 11(4):1909-1928.
- Şahin S (2011b). An aspect on the school culture in Turkey and the United States. *Asia Pacific Educ. Rev.* 12:593-607.
- Şahin S (2011c). Instructional leadership in Turkey and The United States: Teachers' perspective. *Problems of Education in the 21 Century* 34:122-137.
- Şenol Ş (2012). Araştırma ve Örnekleme Yöntemleri. Ankara: Nobel Yayınları.
- Tahaoglu F, Gedikoğlu T (2009). İlköğretim okulu müdürlerinin liderlik rolleri. *Kuram ve Uygulamada Eğitim Yönetimi (Educational Administration: Theory and Practice)* 15(58):274-298.
- Taşçı D, Koç U (2007). Örgütsel vatandaşlık davranışı – örgütsel öğrenme değerleri ilişkisi: Akademisyenler üzerinde görgül bir araştırma. *Anadolu Üniversitesi Sosyal Bilimler Dergisi (Anadolu University J. Soc. Sci.* 7(2):373-382.
- Taştan M, Yılmaz K (2008). Örgütsel vatandaşlık ve örgütsel adalet ölçeklerinin Türkçeye uyarlanması. *Eğitim ve Bilim.* 33(150):87-95.
- Tavşancıl E (2006). Tutumların ölçülmesi ve SPSS ile veri analizi. Ankara: Nobel Yayınları. 3. Basım.
- Titrek O, Bayrakçı M, Zafer D (2009). Öğretmenlerin örgütsel vatandaşlık davranışlarına ilişkin görüşleri. *Uluslararası Hakemli Sosyal Bilimler E-Dergisi* 17:1-28.
- Tschannen-Moran M (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educ. Adm. Q.* 45(2) :217-247.
- Usluel YK, Vural FK (2009). Bilişsel kapılma ölçeğinin Türkçeye uyarlama çalışması. *Ankara Üniversitesi Eğitim Fakültesi Dergisi* 42(2):77-92.
- Yıldırım İ (2012). Beden eğitimi öğretmenlerinin öz-yeterlilikleri ile örgütsel vatandaşlık davranışlarının incelenmesi. *Doktora tezi. On Dokuz Mayıs Üniversitesi, Sosyal Bilimler Enstitüsü, Samsun.*
- Yılmaz A, Ceylan ÇB (2011). İlköğretim okulu yöneticilerinin liderlik davranış düzeyleri ile öğretmenlerin iş doyumu ilişkisi. *Kuram ve Uygulamada Eğitim Yönetimi. Educ. Admin. Theory and Practice)* 17(2):277-394.
- Yılmaz K, Taşdan M (2009). Organizational citizenship and organizational justice in Turkish primary schools. *J. Educ. Admin.* 47(1):108-126.
- Yılmaz K (2009). Özel dersane öğretmenlerinin örgütsel güven düzeyleri ile örgütsel vatandaşlık davranışları arasındaki ilişki. *Kuram ve Uygulamada Eğitim Yönetimi. Educ. Admin. Theory and Practice* 15(59):471-490.
- Yılmaz K (2010). Kamu ortaöğretim okulu öğretmenlerinin örgütsel vatandaşlık davranışları ile ilgili görüşleri. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi* 29(1):1-16.
- Yukl G (1989). Managerial leadership: A review of theory and research. *J. Manage.* 15(2):251-289.
- Yücel C, Samancı KG (2009). Örgütsel güven ve örgütsel vatandaşlık davranışı. *Fırat Üniversitesi Sosyal Bilimler Dergisi. Fırat University*

J. Soc. Sci. 19(1):113-132.

ⁱ The data of this study are the data from the researches of "Leadership Styles of School Principals According to Teacher' Perceptions" and "Teachers' Opinions on Organizational Citizenship Behaviors" prepared by the researcher.

Full Length Research Paper

Techniques use by Science, Technology and Mathematics (STM) teachers for controlling undesirable classroom behaviours in Anambra State secondary schools

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This study investigated the techniques used by secondary school Science Technology and Mathematics (STM) teachers in controlling undesirable behaviours in their classrooms. It adopted descriptive survey design in which 178 Anambra State teachers teaching STM subjects in senior secondary were involved in the research. Two sections of questionnaire used for data collection were validated and coefficients of internal consistency found to be 0.82 and 0.79. Data collected were analyzed using mean, percentage and t-test. Findings revealed that: Teachers always use traditional techniques science classroom; there is a significant difference in the mean rating of experienced and beginning teachers on their use of various techniques for controlling students' behaviours in favour of experienced teachers and male and female teachers do not differ significantly in their use of various techniques. It was recommended that beginning teachers should face orientation on use of the techniques.

Key words: Undesirable behaviour, management, adolescents, experience and beginning teachers.

INTRODUCTION

The Federal Ministry of Education (2008) emphasizes the importance of science and technology by making mathematics, and at least one major science subject (biology, chemistry, physics) compulsory for all the senior secondary school students in Nigeria. This compulsory nature of some Science Technology and Mathematics (STM) subjects carries the fact that they form the mainstay of science and technology in the country. According to Mbah and Leghara (2008), knowledge of

science is vital for achieving technological advancement of a nation. In addition, the STM subjects constitute the basic entry requirement for studying professions such as medicine, engineering, pharmacy, agriculture, architecture, geology, physical and biological sciences, etc, especially studying at university level.

The importance of STM education in the country is not debatable yet the general performance of students in these STM subjects is poor (NECO, 2011; WAEC, 2010)

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that one wonders how the level of performance of science, technology and mathematics students will commensurate with the level of attainment of science and technology goals as stated in the National Policy on Education (FRN, 2008). A great deal of studies (Backley et al., 2005; Deal, 2011; Himanshu, 2012; Okigbo and Okeke, 2013) have recommended different teaching methods, techniques and approaches for improvement of STM students performance, yet the poor performance still persist. Nobody seems to consider some socio-cultural variables like students behaviour in the classroom (Socio-cultural variables most importantly students behavioural pattern is a major component that could ensure significant performance in the teaching and learning process). It is believed that behaviours exhibited by students in the science classroom influence the way and manner they assimilate learning experiences.

In Nigeria, there has been a general public outcry about undesirable behaviours in the schools and society. Indiscipline at the moment is cruel in the entire educational system that discipline is at the (it's) very low ebb in many classrooms. The tendency is for everyone concerned to exculpate and blame the lapses on others. Students' disruptive behaviours have become increasingly the greatest occupational hazard of teaching profession in recent times. Njoku (2004) stressed that indiscipline at the moment is a bugbear in entire educational system. Njoku further stated that because of the prevailing socio-cultural and economic situation in the country, the incidence of deviant activities is expected to be high. According to him, it manifests itself in different guises but the type that engages attention is indiscipline amongst students. Hardly a week passes without news of the student unrest resulting in unwanted disruption of classroom atmosphere/properties (Cite a source). These were manifested in the destruction of school properties, injuring staff and destroying science laboratory equipment. This is not surprising because these young minds (Adolescents) in secondary schools are full of life and need to exhibit/showcase them.

Behaviour is an activity of an individual due to his interaction with environment. An individual selects one response instead of another because of prior conditioning and psychological drives existing at the moment of the action. One may therefore conclude that behaviours are the sum total of all the activities of an organism (both observed and unobserved) as he interacts with his environment. There are many factors which affect a person's behaviour. They include; psychological, physical needs motives, social stimuli, physiological need, etc. As a result of this a lot of people especially the adolescents manifest behaviour that is abnormal or unsatisfactory in some respect either to themselves or the society or both. Undesirable behaviour as seen by Ndua-Ozo (2005) is any behaviour pattern that fails to meet with the norms of the environment.

Cummings et al. (2006), noted that students that have learning, emotional and physical impairments are prone to be bullied by their peers. They are friendless because they are abusive, destructive, unpredictable, quarrelsome, and jealous. Because of all these, people like the STM teachers avoid them. Finn et al. (2008), define undesirable behaviour within the classroom in different terms associated with students' behaviour like coming late, leaving seats, cutting class, refusing to follow directions, speaking without permission, not completing assignments and cheating. Such types of undesirable classroom behaviours are directly connected to dropping out or poor and reduced academic achievement. Specifically, undesirable behaviours according to Okutan (2005) are the ones decreasing the quality of STM classrooms management. Thus, they disturb the STM teachers and other students in the classroom negatively; affecting students' relationship and communication with other students and with their teachers; hindering educational goals, plans and studies.

There are many techniques which are used in behaviour management/control in the classroom which includes: referrals (Olayinka, 2005); caning, manual and corporal punishment, counseling and class monitoring (Anagbogu, 2002); reinforcement (Omebe, 2005); decreasing reinforcement, satiation, fear reduction, class monitoring, prosaically behaviour, moral education, principle of extinction and cueing model (Denga, 2005). Others include; extinction timeout, modeling and shaping. The positive techniques if judiciously used may go a long way in shaping students undesirable behaviours as against the negative technique (traditional method) of behaviour management. It seems that there is no headway in the current choice made by some STM teachers, because a lot of students still manifest behaviours that are abnormal or unsatisfactory in the classroom. Therefore, there is need to expose science teachers to principles and concepts of behaviour management to enable them pilot (train) the young adolescents who have a lot of emotional problems within the school classroom. The study sets out to determine such techniques that could be used.

However, the socially undesirable behaviours could be managed and possibly changed by the teachers through the effective use of constructive techniques. From what is obtainable in the school system today, it seems that the STM teachers have not adequately used these techniques because the science students' undesirable behaviours are either completely unchanged or ineffectively changed. Could it be that teachers are not able to use adequate techniques to control such behaviours or they are completely ignorant of them? Or could the use of different techniques depend on science teachers teaching experience and gender? Okigbo (2010), studied the effectiveness of teaching mathematics by female mathematics teachers in Anambra State boys' secondary

schools using a sample of 66 female mathematics teachers and 1, 200 senior secondary school students. A descriptive survey design was adopted using questionnaire as the instrument for data collection. One of her major findings is that; female mathematics teachers are poor in classroom management and control and despite the fact that they rarely punish deviants, boys prefer male mathematics teachers to females. She recommended that teachers and students should have set rules and regulations on class compartments and determines punishment for violators.

In another study, Okigbo and Okeke (2011) investigated the perceived difficulty in integrating educational objectives within the mathematics classroom in Anambra State, Nigeria with a sample of 105 experienced and 12 beginning mathematics teachers. They found that; there is a significant difference between experienced and beginning mathematics teachers' perception of their difficulties in using appropriate skills for mathematics teaching in favour of the experienced teachers, male and female mathematics teachers do not differ significantly in the level of difficulty they perceive in using the skills. Based on the findings, they recommended that beginning teachers should face orientation on the use of appropriate skills at the time of taking the teaching job. The study sought to investigate the techniques adopted by STM teachers in managing the science students' undesirable behaviours in the classroom. The study would also look into the possible influence of intervening variables like science teachers' experience and gender in the use of various techniques in controlling such behaviours in their classroom.

Purpose of the study

The purpose of this study is to investigate the techniques used by STM teachers in controlling undesirable behaviours in science classroom. Specifically, the study sought to;

1. Identify the undesirable behaviours manifested by STM students in the classroom.
2. Investigate various techniques used by STM teachers in controlling the undesirable behaviours by students in the science classroom.
3. Determine the influence of teachers' teaching experience on the use of the identified techniques in controlling students' undesirable behaviours.
4. Investigate gender influence on the STM teachers' use of various techniques in controlling students' classroom undesirable behaviours.

Research Questions

1. What are the undesirable behaviours manifested by

- science students in the secondary School classroom?
2. What are the various techniques used by STM teachers in controlling the undesirable behaviours by students in the science classroom?
3. How does the teachers' teaching experience influence their use of the identified techniques in controlling students' undesirable behaviours?
4. How do the techniques used by male and female science teachers in correcting undesirable behaviours among students in their classroom compare?

Hypotheses

Ho₁: There is no significant difference in the mean rating of experienced and beginning STM teachers on their use of various techniques for controlling students' undesirable behaviours in the classroom ($P < 0.05$).

Ho₂: Male and female STM teachers do not differ significantly in their use of various techniques for controlling students' undesirable classroom behaviours ($P < 0.05$).

METHODOLOGY

The research adopted a descriptive survey design in which all the STM teachers found in the 26 secondary schools were involved in the study. In this research, the STM teachers are the teachers of agricultural science, basic science, basic technology, biology, chemistry, computer science, mathematics and physics, but only the STM teachers teaching in the senior secondary classes were considered. Out of 260 secondary schools found in Anambra State, Nigeria, 10% of the schools were chosen by simple random sampling technique. A total of 178 STM teachers teaching STM subjects in the senior secondary school were used. Also, from the 26 secondary schools chosen a total of 147 experienced (19 males + 128 females) and 31 Beginning STM teachers were identified and used for the study. Beginning teachers are those with less than five years experience in teaching STM subjects while those who have taught for five years or more are classified as experienced teachers.

Data were collected using questionnaire which was constructed by the researchers. The questionnaire was divided into two parts; A and B. Part A deals with the personal data of the respondents used to obtain information about their school name, sex, years of teaching experience and age. Part B is divided into two sections; I and II. Section I seeks responses from the STM teachers on the undesirable behaviours of their students while section II deals with techniques used in controlling the students in the science classroom. Section I consisting of 18 items (undesirable behaviours), is (of) a four-point scale of (consisting of) strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD) having 4, 3, 2 and 1 point respectively. Section II is a four point scale of always use (AU), sometimes use (SU), rarely use (RU) and never use (NU) also having 4, 3, 2 and 1 point respectively which is made up (consisting) of 20 techniques used by STM teachers in controlling the identified behaviours in the science classroom.

The instrument was validated using; two experienced STM teachers and one guidance counselor from three secondary schools and one expert in Education Management and Policy from Nnamdi Azikiwe University, Awka. The final draft of the instrument

Table 1. Undesirable classroom behaviours emitted by science students.

Undesirable behaviour	Mean	Percentage (%)	Remark
Noise making	3.12	78	Agree
Absenteeism	1.60	40	Disagree
Lateness	2.55	63.8	Agree
Cheating	2.74	68.5	Agree
Refusing to follow directions	3.15	78.8	Agree
Fighting	1.85	46.3	Disagree
Inactive participation	2.98	74.5	Agree
Molestation	2.33	58.3	Disagree
Restlessness	3.05	76.3	Agree
Bullying	2.28	57	Disagree
Sleeping off	2.40	60	Disagree
Inattentiveness	3.00	75	Agree
Cutting class	2.55	63.8	Agree
Withdrawal	2.05	51.3	Disagree
Stealing	2.84	71	Agree
Leaving seats	2.35	58.8	Disagree
Not completing assignments	3.82	95.5	Agree
Speaking without permission	1.95	48.8	Disagree
Total	2.59	64.8	-

was designed to reflect the corrections from the validations. Also, the Cronbach alpha technique was used to establish the coefficients of internal consistency for the two sections of the instrument, and the values were found to be 0.81 and 0.79 respectively for sections I and II, which indicated that the instrument is reliable.

The instrument was administered by the two researchers with the help of one STM teacher from each of the 26 secondary schools used for the study. The completed copies were retrieved on the spot by those 26 STM teachers which were later collected by the researchers. The data generated were analyzed using mean, standard deviation and percentages for answering the research questions and the t-test for testing the hypotheses at 0.05 levels of significance.

The point 2.50 was taken as cutoff; for section I, any item with a mean above 2.50 was viewed as being agreed by the respondents, any mean score below 2.50 was taken to be disagreed by them while the mean score of 2.50 was taken to be neither agreed nor disagreed by them. Also, for section II; any item with a mean above 2.50 was viewed as being used by science teachers; if below 2.50 was taken as not used while the mean score of 2.50 was taken to be indifferent.

RESULTS

Data collected were analyzed and presented in Tables 1 to 6 according to the four research questions and two hypotheses.

Research Question 1: What are the undesirable behaviours manifested by science students in the secondary school classroom?

Table 1 reveals that undesirable behaviours commonly seen in STM classrooms are; noise making, lateness, cheating, refusing to follow direction, inactive participation, restlessness, inattentiveness, stealing and not completing assignment. However, the most prominent among them is non completion of the assignment which was agreed by 95.5% of the respondents.

Research Question 2: What are the various techniques used by STM teachers in controlling the undesirable behaviours by students in the science classroom?

Table 2 reveals that STM teachers commonly use corporal punishment, negative reinforcement, manual punishment, caning, class monitoring and peer correction. Thus, they use predominantly the traditional techniques apart from the last two (class monitoring and peer correction). However, they never use modeling, satiation, extinction timeout and decreasing reinforcement techniques. In addition, their responses are far apart in item 9 which is the cueing principle with a mean of 2.50 and standard deviation score of 1.34.

Research Question 3: How does the teachers' teaching experience influence their use of the identified techniques in controlling students' undesirable behaviours?

Table 3 shows that experienced and beginning STM teachers did not agree in the use of seven (7) out of the twenty (20) listed techniques. These techniques include;

Table 2. Techniques used by STM teachers in controlling undesirable behaviours.

Techniques	Mean	Standard deviation	Remark
Counseling	2.42	0.83	Not use
Corporal punishment	3.41	0.88	Use
Positive reinforcement	2.45	1.05	Not use
Referral	2.05	0.32	Not use
Principle of extinction	2.38	1.11	Not use
Class monitoring	3.34	0.55	Use
Negative reinforcement	3.56	0.76	Use
Shaping	2.15	0.35	Not use
Cueing principle	2.50	1.34	Indifferent
Modeling	1.95	0.76	Not use
Manual punishment	3.52	0.42	Use
Caning	3.72	0.68	Use
Satiation	1.95	0.81	Not use
Fear reduction	2.08	0.44	Not use
Moral education	2.58	1.05	Use
Prosaically behaviour	2.04	1.22	Not use
Extinction timeout	1.93	0.52	Not use
Decreasing reinforcement	1.90	0.49	Not use
Peer correction	3.55	0.53	Use
Silence	2.53	0.55	Use
Total	2.60	0.73	-

Table 3. Techniques used by experienced and beginning STM teachers in controlling classroom behaviours.

Techniques	Teachers	Mean	Standard deviation	Remark
Counseling	Experienced	2.54	0.65	Use
	Beginning	2.30	1.01	Not use
Corporal punishment	Experience	3.62	1.01	Use
	Beginning	3.20	0.75	Use
Positive reinforcement	Experienced	2.62	0.82	Use
	Beginning	2.28	1.28	Not use
Referral	Experienced	2.20	0.12	Not use
	Beginning	1.50	0.52	Not use
Principle of extinction	Experienced	2.41	0.88	Not use
	Beginning	2.35	1.34	Not use
Class monitoring	Experienced	3.40	0.59	Use
	Beginning	3.28	0.51	Use
Negative reinforcement	Experienced	3.48	0.74	Use
	Beginning	3.64	0.78	Use
Shaping	Experienced	2.22	0.29	Not use
	Beginning	2.08	0.41	Not use

Table 3. Cont'd

Cueing principle	Experienced	2.81	1.10	Use
	Beginning	2.19	1.58	Not use
Modeling	Experienced	2.15	0.64	Not use
	Beginning	1.75	0.88	Not use
Manual punishment	Experienced	3.68	0.45	Use
	Beginning	3.36	0.39	Use
Caning	Experienced	3.81	0.64	Use
	Beginning	3.63	0.72	Use
Satiation	Experienced	2.34	0.45	Not use
	Beginning	1.56	1.17	Not use
Fear reduction	Experienced	2.51	0.45	Use
	Beginning	1.65	0.43	Not use
Moral education	Experienced	2.73	0.98	Use
	Beginning	2.43	1.12	Not use
Prosaically behaviour	Experienced	2.08	0.89	Not use
	Beginning	2.00	1.55	Not use
Extinction timeout	Experienced	2.52	0.39	Use
	Beginning	1.34	0.65	Not use
Decreasing reinforcement	Experienced	2.05	0.33	Not use
	Beginning	1.75	0.65	Not use
Peer correction	Experienced	3.45	0.58	Use
	Beginning	3.65	0.48	Use
Silence	Experienced	3.00	0.43	Use
	Beginning	2.06	0.67	Not use
Total	Experienced	2.81	0.62	-
	Beginning	2.40	0.84	-

counseling, positive reinforcement, cueing principle, fear reduction, moral education, extinction timeout and silence. The table further reveals that on average experienced teachers use the identified techniques while the beginning teachers do not. Based on the difference in their opinion, hypothesis one was tested for significant difference. Table 5 presents the summary of the t-test statistics.

Research Question 4: How do the techniques used by male and female science teachers in correcting undesirable behaviours among students in their classroom compare?

From Table 4, male and female STM teachers disagree in the use of seven (7) techniques which include;

counseling, positive reinforcement, cueing principle, fear reduction, moral education, extinction timeout and silence. In general, both gender use the identified techniques but not at the same rate. Based on this, Ho2 was tested for significant difference which is presented in Table 6.

Ho₁: There is no significant difference in the mean rating of experienced and beginning STM teachers on their use of various techniques for controlling students' undesirable behaviours in the classroom ($P < 0.05$).

Since the value of t- calculated (2.572) is greater than the t- critical (1.645) the Ho1 is rejected at 0.05 α levels. Therefore, there is a significant difference in the mean rating of experienced and beginning STM teachers on

Table 4. Techniques used by male and female STM teachers in controlling classroom behaviours.

Techniques	Gender	Mean	Standard deviation	Remark
Counseling	Male	2.23	0.58	Not use
	Female	2.85	0.72	Use
Corporal punishment	Male	3.70	0.95	Use
	Female	3.54	1.07	Use
Positive reinforcement	Male	2.32	0.76	Not use
	Female	2.92	0.88	Use
Referral	Male	2.16	0.09	Not use
	Female	2.24	0.15	Not use
Principle of extinction	Male	2.36	0.81	Not use
	Female	2.46	0.95	Not use
Class monitoring	Male	3.62	0.66	Use
	Female	3.18	0.52	Use
Negative reinforcement	Male	3.65	0.63	Use
	Female	3.31	0.85	Use
Shaping	Male	2.25	0.36	Not use
	Female	2.19	0.22	Not use
Cueing principle	Male	3.15	1.02	Use
	Female	2.47	1.18	Not use
Modeling	Male	2.24	0.73	Not use
	Female	2.06	0.55	Not use
Manual punishment	Male	3.92	0.40	Use
	Female	3.44	0.50	Use
Caning	Male	3.95	0.48	Use
	Female	3.67	0.80	Use
Satiation	Male	2.35	0.36	Not use
	Female	2.33	0.54	Not use
Fear reduction	Male	2.08	0.32	Not use
	Female	2.94	0.58	Use
Moral education	Male	2.31	0.93	Not use
	Female	3.15	1.03	Use
Prosaically behaviour	Male	2.09	0.78	Not use
	Female	2.07	1.00	Not use
Extinction timeout	Male	2.58	0.44	Use
	Female	2.46	0.34	Not use
Decreasing reinforcement	Male	2.21	0.24	Not use
	Female	1.89	0.42	Not use
Peer correction	Male	3.15	0.66	Use
	Female	3.75	0.50	Use
Silence	Male	2.42	0.48	Not use
	Female	3.58	0.38	Use
Total	Male	2.74	0.58	Use
	Female	2.83	0.66	Use

Table 5. The t-test of significant difference in the techniques used by Experienced and Beginning STM teachers.

Participants (Teachers)	N	Meanx	Std. deviation	α	df	t-cal	Decision
Experienced	147	2.81	0.62	0.05	176	2.572	Significant
Beginning	31	2.40	0.84				

Table 6. The t-test of significant difference in the techniques used by Male and Female STM teachers.

Participants	N	Meanx	Std. deviation	α	df	t-cal	Decision
Male	19	2.74	0.58	0.05	145	0.619	Not significant
Female	128	2.83	0.66				

their use of various techniques for controlling students' undesirable behaviours in the classroom in favour of experienced teachers.

Ho₂: Male and female STM teachers do not differ significantly in their use of various techniques for controlling students' undesirable classroom behaviours ($P < 0.05$).

Table 6 shows that the value of t- calculated (0.619) is less than the t- critical (1.645) meaning that the Ho₂ is not rejected. Thus, male and female STM teachers do not differ significantly in their use of various techniques for controlling students' undesirable classroom behaviours.

DISCUSSION

Table 1 revealed that undesirable behaviours commonly seen in STM classrooms are; noise making, lateness, cheating, refusing to follow direction, inactive participation, restlessness, inattentiveness, stealing and not completing assignments. The most prominent among them is non completion of the assignment which was agreed by 95.5% of the respondents followed with refusal to follow direction (78.8%) and noise making (78%). However, Table 1 further showed that; absenteeism, fighting, molestation, bullying, sleeping off, withdrawal, leaving seats and speaking without permission were not usually emitted by the science students in the classrooms. The findings from this study did not completely agree with the reports of Finn et al. (2008) who listed the undesirable behaviours within the classroom as; coming late, leaving seats, cutting class, refusing to follow directions, speaking without permission, not completing assignments and cheating. The reason could be that the present study focused on the Nigerian classroom which may be different from the classrooms

used by Finn, Fish and Scott.

Table 2 showed that the STM teachers commonly use corporal punishment, negative reinforcement, manual punishment, caning, class monitoring and peer correction. That is, they use predominantly the traditional techniques apart from class monitoring and peer correction. However, they never use modeling, satiation, extinction timeout and decreasing reinforcement techniques and they were indifferent in their opinion on the use of the cueing principle with the highest standard deviation score of 1.34. The findings from the research gave credence to the findings of Anagbogu (2002), Omebe (2005) and Owen (2005) who identified caning, manual and corporal punishment, counseling, class monitoring, reinforcement as the techniques mainly used by teachers in their classroom. In some respect, the reports of this study were not in line with the findings of Denga (2005) and Olayinka (2005). They added among other techniques for behaviour management in the classroom to include: referrals, decreasing reinforcement, satiation, fear reduction, class monitoring, prosocially behaviour, moral education, principle of extinction and cueing model.

Table 3 showed that experienced and beginning STM teachers did not agree in the use of seven (7) (counseling, positive reinforcement, cueing principle, fear reduction, moral education, extinction timeout and silence) out of the twenty (20) listed techniques. The table further revealed that on average, experienced teachers uses the identified techniques while the beginning teachers do not. Based on the difference in their opinion, hypothesis one was tested to find out if significant difference exists. Results on Table 5 showed that there is a significant difference in the mean rating of experienced and beginning STM teachers on their use of various techniques for controlling students' undesirable behaviours in the classroom. This was in favour of experienced teachers. The finding from this study is line

with the findings of Okigbo and Okeke (2011) who found that a significant difference existed between experienced and beginning mathematics teachers' perception of their difficulties in using appropriate skills for mathematics instruction in favour of the experienced teachers. The appropriate skills included classroom management and control. The findings from this study is not surprise because the experienced STM teachers might have gathered a lot of classroom experiences on how to guide these young adolescents and manage their behaviours in the process.

Table 4 had shown that male and female STM teachers disagreed in the use of seven techniques which include; counseling, positive reinforcement, cueing principle, fear reduction, moral education, extinction timeout and silence. In general, both gender use the identified techniques but not at the same rate. This finding deviated from that of Okigbo (2010) who found that female mathematics teachers are poor in classroom management and control and despite the fact that they rarely punish deviants, boys prefer male mathematics teachers to females. To test for a significant difference that might exists, hypothesis two was tested. The result of the test as shown on Table 6 revealed that male and female STM teachers do not differ significantly in their use of various techniques for controlling students' undesirable classroom behaviours. Hence, the little difference in the mean and standard deviation scores is a matter of chance. The findings from this study gave support to the findings of Okigbo and Okeke (2011). They found that male and female mathematics teachers do not differ significantly in the level of difficulty they perceive in using the appropriate skills in the mathematics classroom.

Conclusions

Based on the findings from the results, the following conclusions were drawn:

1. The most prominent among undesirable behaviour among science students is non completion of assignments which was agreed by 95.5% of the respondents followed with refusal to follow direction (78.8%) and noise making (78%).
2. STM teachers predominantly use traditional techniques such as corporal punishment, negative reinforcement, manual punishment, caning apart from class monitoring and peer correction.
3. There is a significant difference in the mean rating of experienced and beginning STM teachers on their use of various techniques for controlling students' undesirable behaviours in the classroom in favour of experienced teachers.
4. Male and female STM teachers do not differ significantly in their use of various techniques for

controlling students' undesirable behaviours in the classroom.

RECOMMENDATIONS

Considering the findings from the study, the following recommendations were made:

1. Seminars should be organized for secondary school teachers on the ways to help teachers understand their own behaviour and those of their students.
2. Regular and surprise inspections of schools should be intensified to help check teachers who serve as role models.
3. Beginning teachers should face orientation on the use of various techniques for controlling undesirable behaviours in the science classroom at the time of taking the teaching job.
4. Teacher education programmes should intensify their course programmes on the area of child psychology and guidance and counseling.

Conflicts of Interests

The authors have not declared any conflicts of interests.

REFERENCES

- Anagbogu MA (2002). *Guidance and Counseling in Primary Schools: Teachers' Handbook*. Awka: Mercury Bright.
- Backley EF, Cross KP, Major CH (2005). *Collaborative Learning Techniques: A Handbook for College Faculty*. San Francisco: Jossey Brass.
- Cummings JG, Repler DJ, Mishna F, Craig WM (2006). Bullying and victimization among students with exceptionalities. *Exceptionality Educ.* 16:193-227.
- Deal TE (2011). Modifying the effect of age within decision making groups. The Stanford University Technical Report No 4.
- Denga DI (2005). *Guidance and Counseling for the 6-3-3-4 System of Education*. Jos: Savanna.
- Federal Ministry of Education (FME) (2008). *National Policy on Education*. Lagos: NERDC.
- Finn J, Fish R, Scott L (2008) Educational Sequel of high school misbehavior. *J. Educ. Res.* 2:258-262.
- Himanshu M (2012). *Laboratory method of teaching science*. A Monograph.
- Mbah CN, Leghara BN (2008). Science education in Nigeria: Current curriculum practices and implication for national development. *Proceedings of the 49th Annual Conference of Science Teachers Association of Nigeria (STAN)*, Bayelsa, pp. 31-35.
- Ndua-Ozo OC (2005). Educational opportunities for Nigerian learner: How do we fare thus far? Paper presented at the workshop organized by Network for Gender sensitive Educational Management to Africa and the British Council in Nigeria.
- National Examination Council (NECO) (2011). Chief Examiner's report.
- Njoku BO (2004). Youthful exuberance. Unpublished paper presented at the 2004 students week of Michael Okpara University of Agriculture, Umudike. June.
- Okigbo EC (2010). Effectiveness of teaching mathematics by female

- mathematics teachers in boys' secondary schools. *Int. J. Educ. Res. Dev.* 4(1):59-67.
- Okigbo EC, Okeke SOC (2011). Perceived difficulty in integrating educational objectives within the mathematics classroom: A comparison of beginner and experienced teachers. *Educ. Res. Rev.* 6(3):292-298.
- Okigbo EC, Okeke NF (2011). Game and analogy: A bimodal for effective instruction in the Nigerian mathematics classroom. *Universal J. Educ. Gen. Stud.* 2(5):175-179.
- Okutan ZC (2005). Fostering the application of Science Education research findings in Nigerian classrooms, strategies and need for teachers professional development. *Proceedings of the 31st Annual Conference of STAN*, pp. 217-222.
- Olayinka MA (2005). Crisis in integrated science classrooms, strategies and need for teachers' professional development. *Proceedings of the 31st Annual Conference of STAN*, pp. 212-216.
- Omebe AO (2005). *New Approaches to the Teaching of Integrated Science*. Ibadan: Alfas Nigeria.
- West African Examination Council (2010). *Chief Examiners' reports*, May/June.

Full Length Research Paper

The effects of peer tutoring on university students' success, speaking skills and speech self-efficacy in the effective and good speech course

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In this study, the effects of the use of peer tutoring in Effective and Good Speech Course on students' success, perception of speech self-efficacy and speaking skills were examined. The study, designed as a mixed pattern in which quantitative and qualitative research approaches were combined, was carried out together with 57 students in 2014 to 2015 Academic Year at Erzincan University. The 30 of the students were in the experimental group while the rest 27 were identified as the control group. In the experimental group, the Effective and Good Speech Course was performed within the scope of peer tutoring practices, on the other hand, in the control group it was conducted through an individual education program which was teacher centred. Effective and Good Speech Achievement Test, Speech Self-Efficacy Perception Scale and Effective Speech Scale were used as data collection tools. Semi-structured interview forms were used in collecting qualitative data. Interview records were coded according to specified categories, and frequencies and percentages were calculated and analysed. In the analysis of quantitative data, independent samples t-test and multiple analyses of variance (MANOVA) were used. It was observed that the success, perception of speech self-efficacy and speaking skills of the students in the experimental group in which peer tutoring practices were applied (n=30) were better when compared with the control group (n=27) at the end of a 6-week study. In addition, it was seen that the students in the experimental group had positive attitudes against peer tutoring practices.

Key words: Speaking skills, peer tutoring, effective and good speech, speech self-efficacy.

INTRODUCTION

Speaking is the most important language activity that ensures the communication between people. The more effective, coordinated and clear the communication

between people is, the more success is achieved. The key for the successful communication is to speak effectively, be understandable and use the phonetic

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efficiently (Özbay, 2007: 99). Effective speech; although not pre-planned, is the ability that provides one to tell his feelings, wishes and ideas to others in an efficient way (Yalçın, 2002). Temizyürek et al. (2011) indicated that effective speech means that any kind of message coded by the speaker can be transmitted to listener with the highest effect and in accordance with speaking principles.

Teaching effective and good speech includes being fluent in expression, ranking the things to be expressed according to a plan and using language materials according to the interests, age and level. Teaching effective and good speech involves prepared-unprepared conversations, classrooms conversations, dramatisations, memories, anecdotes, stories, fairy tales, movies, presentations and species of lectures (Yıldız, 2008: 164). It is required to give speaking skills on demanded level and relevant to its purpose so that the individuals can have strong position in the society and be successful in their jobs. Our success in human relations, workplace and school completely depends on speaking power and expressing ourselves with words, gesture and mimic to other people (Er, 2010). The concern to develop speaking skills is the duty of each step of the educational institutions but primarily of the mother language teachers (Gündüz and Şimşek, 2014; Ceran, 2012). Goodness and effectiveness of speaking which is an inborn skill depends on the education in this field. Skills can be improved without any effort. No matter which skills somebody has, s/he should train and practise in order to improve it. Also, skills which are trained and improved should be kept active with often repetition and practice (Doğan, 2009).

Peer tutoring

Peer tutoring is the process in which a pre-trained successful student teaches a concept or skill to another student or to a group of students under the leadership of the teacher (Gearheart et al., 1992). Peer tutoring is often referred by educators as it increases the learning rate, contribute to social skill development, develop a range of other skills, and provide emotional benefits to the students (McKellar, 1986; Ayvazo and Aljadef-Abergel, 2014). The students both improve their friendship relations and assist each other in learning thanks to the group studies they perform within the scope of peer tutoring. When studying together, using more similar and clear utterances positively affects the success of the peers (Karakoç, 2002). In addition, peer tutoring contributes to student motivation towards courses besides developing discussion, expression and interrogation skills (Topping et al., 2011).

Peer tutoring is implemented in different ways. In mutual peer tutoring, one of the aforementioned ways, the teaching and learning roles of the students can be swapped as they are at the same level. (Rittschof and

Griffin, 2001). In cross peer tutoring, on the other hand, peer matching is mostly between the successful students and the ones who have some learning difficulties. Students with academic competency always take the teaching role, the others are learners (Moor and Walters, 2014).

Studies have proved that peer tutoring is frequently used abroad and this method has some positive results such as improving academic achievement, increasing students' confidence and developing attitudes and interests against the courses (Robinson, Schofield and Steers-Wentzell, 2005; Hussain et al., 2011; Topping et al., 2003; Britz vd., 1989; Naseerali, 2013).

Peer tutoring practices are mostly applied in health and special training areas in our country. Peer tutoring was applied in science, mathematics and physics courses and its effects on success, attitudes and permanence were examined (Eryılmaz, 2004; Tokgöz, 2007; Demirci and Çirkinoğlu, 2009; Savaş, 2011).

It is stated that peer tutoring is an effective method especially for the students who have learning problems. As a result of the study carried out within the scope of mutual peer tutoring model, Topping et al., (2003) found that 64 students between the ages 9 to 11 who had learning problems in mathematics made progress to a degree. Gebeş (2011) concluded that peer tutoring supported anger management training program was effective in high school students' anger management. Similarly, Yelpaze (2012) specified that peer-mediated social skills training program had effects in reducing the aggression level of the secondary school students. In another study it was pointed out that peer tutoring had a positive impact on children whose academic success has social and emotional disorders (Bowman-Perrott et al., 2013).

Some of the studies relating to peer tutoring are practiced to determine whether it has any impacts on teaching skills, academic success and social behaviours of teacher candidates. Kuru Gönen (2012) identified that reflective peer tutoring that he applied to the English teacher candidates contributed to their teaching skills and improved their social and emotional sides. In his study, Savaş (2012) figured out that peer tutoring supported scientific process skills laboratory approach is an effective method in developing the high level scientific process skills of the teacher candidates. Pulling and Allen (2014) identified that peer tutoring program that they applied to the teacher candidates studying at Michigan University, even a little, had effects on students' motor skills teaching and assessing skills.

In the literature, there are also studies in which group work based peer tutoring is used in native language courses. Some of these studies have been carried out to determine the impacts of peer tutoring on reading comprehension and to detect and reduce the reading errors. A range of studies, on the other hand, have been practiced to reveal the contribution of peer tutoring

method on first reading writing process and university students' writing competence (Fuchs et al., 1999; Fuchs and Fuchs, 2005; Güvey Aktan and Gültekin, 2015; Green et al., 2004; Topping et al., 2011; Gür, 2015).

It is noticeable that peer tutoring, recently, has begun to be used abroad especially in higher education institutions (Topping, 1996). The facts that there is a great impact of the peer group on young people's behaviours and the peer teacher receives an appreciation from his friends are two of the main reasons why this method is often preferred by educators. Peer tutoring also offers an affordance to the teachers. Teachers do not need to spend much time on individual expressions as peer tutoring is applicable to large groups. For these reasons, many educators abroad have adopted peer tutoring approach thanks to which they can abandon traditional teaching techniques and ensure their students to be more active.

Telling the feelings, thoughts and wishes in a clear, accurate and complete way is an important skill to be given to our students at schools. In order to supply the students with this skill, it is necessary to use the appropriate methods and techniques, to associate speaking activities with life events and to prepare a speaking environment in which they can freely express their feelings, thoughts and opinions (Temizkan, 2009:94). As stated, students support and encourage each other as well as appreciating each other's knowledge. This allows students to increase their self-confidence. It is very important to use peer tutoring method in native language courses for the development of basic language skills of the students because it makes the courses more intuitive and enjoyable by promoting the interaction and communication among the students.

This study, with the aim of providing experimental outcomes about how peer tutoring is applied in teaching native language and how it affects teaching process, is significant in terms of supplying different approaches to elocution.

The main question of the research is "How effective Peer Tutoring is on students' success, effective speech skills and perception of speech self-efficacy?" The sub-questions of the study are as follows:

1. Is there a significant difference between the experimental group in which peer tutoring practices are applied and control group that individual teaching is carried in terms of the average achievement test scores in Effective and Good Speech Course?
2. Is there a significant difference between the experimental group in which peer tutoring practices are applied and control group that individual teaching is carried in terms of their average scores with regards to their effective speech skills?
3. Is there a significant difference between the experimental group in which peer tutoring practices are applied and control group that individual teaching is carried in terms of their average scores with regards to

the perception of speech self-efficacy?

4. What are the views of the students in the experimental group about Peer Tutoring practices?

METHODOLOGY

Research model

In this study, the effects of the use of peer tutoring in Effective and Good Speech Course on students' academic success, speaking skills and self-efficacy were examined. In the study, exploratory sequential pattern -one of the mixed method patterns- was used. Exploratory sequential design, which is one of the mixed method designs, is an approach in which a researcher collects quantitative data and analyzes the findings in the first stage and forms the second stage by using them (Creswell, 2013:224). The purpose of this pattern is to use the qualitative data to explain the quantitative findings in a more detailed way. The first step in the process comprises of quantitative data collection and analysis. Then it is intended to give a hand in explaining the interviews conducted in qualitative step and the answers given in quantitative extent. In the quantitative design of the research, pretest-posttest control group experimental design was used. In the pretest and posttest control group model, there are a randomly assigned experimental group and a control group, and in both groups there are measurements performed both before and after the experiment (Karasar, 2012). In the experimental group, peer tutoring practices were applied while in the control group a teacher centred individual education program was conducted. In the qualitative part of the research, the data was collected and analyzed through interview forms that indicate the views of the experimental group students about peer tutoring.

Study group

The study group was composed of 57 students studied at Erzincan University in 2014 to 2015 Academic Year Fall Semester. In the experimental group there were 30 students, and in the control group there were 27.

Data collection tools

The groups primarily were given "Effective Speech Achievement Test, "Speech Self-Efficacy Scale" and "Effective Speech Scale" as pre-tests and at the end of the implementation three scales were given as post-tests. "Peer Tutoring Interview Forms" were used as qualitative data collection tool. Students were asked pre-prepared questions through semi-structured interview forms and the answer given were divided into categories of content analysis and reviewed.

Effective and good speech course achievement test

The Achievement Test created to measure the academic achievement of the participating students relating to Effective and Good Speech Course was prepared by researchers. Three instructors lecturing at the level of bachelor's degree were asked opinions in test preparing process. The test included 25 subjects consisting of the cases related to the principles of effective and good speech, monologues, prepared and unprepared speech and reading poetry.

Pilot scheme of the test was implemented on 41 students of a different university. The data obtained from the pilot survey was analyzed. Item distinctiveness index, item difficulty index and reliability of the test were calculated through this analysis. The

reliability of the achievement test consisting of 25 questions was found as $\alpha = 0.845$.

Effective speech scale

Developed by Çintaş Yıldız and Yavuz (2012), the 20 points of the 24 articulated scale contain positive judgments while the rest 4 contain negative judgments. The scale is Likert type and options are as follows: "Completely Agree, Agree, Partially Agree, Disagree, Completely Disagree". Cronbach's α value of the scale (internal consistency) was calculated as 0.92 by Çintaş Yıldız and Yavuz (2012). Effective speech scale was filled separately for each student in experiment and control group by the lecturer who gives the course. This scale consists of 5 sub-dimensions: presentation, sound, style and statement, focusing on speaking and paying attention to listeners and 24 articles.

Speech self-efficacy scale

Developed by Katrancı and Melanlıoğlu (2013), the Speech Self-Efficacy Scale is Likert type and consists of 25 articles. The options of the scale are as follows: "Never, Rarely, Sometimes, Usually, Always". Cronbach's alpha reliability coefficient for the whole scale was calculated by Katrancı and Melanlıoğlu as 0.92.

Peer tutoring interview form

The experimental group students were asked to state their thoughts about positive and negative aspects of peer tutoring, teaching process, relationships with friends and the availability of peer tutoring in other courses. Also, in observation form, students are asked to write their opinion with reasons whether they think the peer tutoring practices beneficial or not.

Data collection and application process

This study was carried out in 2014 to 2015 academic year fall term with 57 sophomores of Erzincan University and 2 h a week during 6 weeks. Applications which were performed in preparation and application processes of the study was given as follows.

Firstly, the pilot scheme of the achievement test of Effective and Good Speech course was applied. Test reliability and analysis of the questions was calculated in this study which was carried out with 41 students. Besides, permission for Speech self-efficacy Scale and Effective Speech Scale was obtained from related researchers who organized these scales. Other data collection means; the achievement test of Effective and Good Speech and Peer Tutoring Interview Form were prepared by the researchers.

Before the application started, an experiment and a control group were objectively chosen for the study. Two classrooms which were equal to each other were selected for the study. Cross tutor training was applied to 30 students in experiment group. In cross tutor training, one student is in more advanced level than the other. According to this, in cross tutor training student who is academically more successful is tutor and the other student is always tutee. In the experiment group there are timid students, students with speech disorder and students with pretty high speaking skills. Study is designed as cross peer tutoring due to this difference of level among the students. In this practice, students with improved speaking skill always positioned as tutor and the matching is never changed during the practice.

The application process of the peer tutoring in the course was planned and carried out as follow:

1. All the students in experiment group were informed about peer tutoring.

2. Lecturer grouped the peers. Six students were determined in the peer grouping and one student with high level of speaking skills was appointed as a leader. Groups were not changed during the practice.

3. Sitting arrangement of the classroom where peer tutoring would be carried out was reorganized so that the students could study with their group friends comfortably.

4. Peers who would play the role of leaders were informed about the subject which would be taught and how to use the related materials.

6. Students who were in the role of tutor studied the related subject with their friends according to lesson plan.

7. During this process, the lecturers observed the students and guide them.

Applications in control group

Achievement test of Speech Course, Effective Speech Scale and Speech self-efficacy scale were applied to students in control group as pre-test. In control group, which included 27 students, 12 h lesson was taught with traditional teaching method during 6 weeks. In individual teaching or tradition teaching students do not interact with each other in contrast to peer tutoring, each student is responsible from his/her own learning, and lecturer directs the course not as a guide but as a teacher. In control group, peer tutoring practice was not applied. During the course when the lecturer is active, students were allowed to speak but they did not interact with each other. At the end of each course students were asked questions for better understanding and the summary of the lesson was also presented.

Data analysis

SPSS 18.0 for windows was used for data analysis. Before the application "Independent samples t-test" was used to find whether there was statistically significant difference between the groups; "multivariate analysis of variance (MANOVA)" was also carried out to determine how much of the change in dependent variables came from the application and "content and frequency analysis" was also performed for the view obtained from semi-structured observation forms which were applied to students of experiment group.

MANOVA is a multivariate statistics used in experimental and scanning researches. It is used to test whether the groups which make up according to single and multi factors show significant differences in terms of multi dependent variables (Büyüköztürk, 2012:137, 138). In MANOVA test it is possible to carry out analysis of variance with multiple dependent variances for the same independent variance. This provides a chance to show the findings in a single table. Assumptions of MANOVA; univariant and multivariate normal distribution of dependent variable points, linearity, outliers, homogeneity of variant – co-variant matrixes and multilinear relation were tested first. In this study all assumptions of MANOVA were met.

RESULTS AND DISCUSSION

Before the application "independent groups t test" was carried out to determine whether there was a significant difference between the students in experiment and control group in terms of their success in Effective and Good Speech course, their perception of self-efficacy to Effective and Good Speech course and their ability to effective speech and obtained findings were presented in

Table 1. Independent samples t test results.

Variable	Group	N	X	SS	df	t	p
Success (B)	DG	30	59.20	6.94	55	-0.509	0.613
	KG	27	85.93	7.95			
Self-efficacy (ÖY)	DG	30	3.41	0.77	55	-1.031	0.307
	KG	27	3.85	0.50			
Effective speaking (EK)	DG	30	3.28	0.46	55	-0.135	0.893
	KG	27	3.75	0.29			

P > 0.05.

Table 2. MANOVA analysis according to group variable for self-efficacy, effective speech and achievement points of the students in experiment and control group.

Source	Dependent variable	Pillai's trace	Sig.	Type III sum of squares	df	Mean square	F	Sig.	Partial squared
Corrected model	Self-efficacy			1.407 ^a	1	1.407	6.176	0.015	0.056
	Effective speaking			24.234 ^b	1	24.234	8.917	0.004	0.074
	Success			276.972 ^c	1	276.972	5.591	0.022	0.092
Intercept	Self-efficacy	0.995	0.000	819.84	1	819.84	2470.517	0.000	0.978
	Effective speaking			773.728	1	773.728	8154.212	0.000	0.993
	Success			398464.9	1	398464.9	8043.57	0.000	0.993
Group	Self-efficacy	0.048	0.038	1.407	1	1.407	6.176	0.015	0.056
	Effective speaking			24.234	1	24.234	8.917	0.004	0.074
	Success			276.972	1	276.972	5.591	0.022	0.920

Table 1.

Before application Findings from Table 1 can be interpreted such that there is no significant difference between success in Effective Speaking Class, Speaking Self Efficiency Perception and Effective Speaking Skills for students ($p^B = 0.613$, $p^{ÖY} = 0.307$, $p^{EK} = 0.893$, $p > 0.05$). This indicates that test and control groups are equivalent prior to application.

According to Büyükoztürk (2012:137), MANOVA is appropriate for testing whether groups based on one or more factors shows significant difference depending on more than one dependent variable. The data also demonstrate that providing the necessary homogeneity of variance-covariance assumptions for multivariate analysis of variance (Box's M = 11.651, $F(1.826) = 0.90$, $p > 0.05$). Therefore MANOVA analysis was given whether in success, effective speaking and speech self-efficacy's total scores scale were significant differences between experimental and control groups. MANOVA results revealed that there are significant differences in terms of effective speech skill between experiment and control groups ($F = 8.917$, $p < 0.05$), perception of speech self-efficacy ($F = 6.176$, $p < 0.05$) and their success in the lesson ($F = 5.591$, $p < 0.05$).

At the end of the work it is aimed that semi-structured interview to students in order to get the views and opinions of the students in the experimental group and to support quantitative data with qualitative data support. The opinions obtained from interview forms were applied to content analysis and codes and themes were identified. Then frequency analysis was done and results obtained as shown in Table 2.

When the data in Table 3 examined, it is inferred that students in experiment group generally opined positively about peer tutoring. According to the obtained data; 70% enjoyed the applications of peer tutoring, 67% stated that peer tutoring activities motivated them and they also made the learning easier, 63% opined that these activities decreased anxiety and stress, 60% expressed that they felt satisfaction thanks to this method and 50% told that their self-confidence increased.

DISCUSSION

Peer tutoring which has been accepted as one of the innovative teaching methods in recent years, was started being used in every step of education from primary

Table 3. The frequency analysis results obtained from interview forms.

Themes	Opinion/code	f	%
Satisfaction	I spent enjoyable and nice time in the lesson. (Ö4)	21	70
	I never get bored in the lesson. (Ö2)		
	I like this lesson most because we used a different method. (Ö23)		
Motivation	This method increased my desire to learn for this lesson. (Ö1)	20	67
	Lessons were more enjoyable thanks to group work. (Ö23)		
	My friends from our group motivated me much in our speaking lesson. (Ö13)		
Making the learning easier	I learnt faster and quicker as I could ask my friends when I could not understand anything. (Ö12)	20	67
	My interaction with my friends from our group helped me to realize my mistakes and correct them. (Ö27)		
	I realized that I learnt lots of things after the lessons finished. (Ö15)		
Decreasing anxiety	Group work decreased my excitement of speech and stress. (Ö1)	19	63
	I joined the lesson without feeling anxiety. (Ö30)		
	My anxiety of speech decreased. (Ö21)		
Satisfaction	Helping each other with group friends made me feel that I was beneficial to some people. (Ö24)	18	60
	It was satisfying that my group friends motivated me. (Ö11)		
	I wish we were taught all other lessons in that way. (Ö22)		
Self-confidence	My self-confidence increased. (Ö19)	15	50
	I respect myself as I could succeed and share my learnings. (Ö29)		
	I gained self-confidence in this lesson. (Ö17)		

education to high education and the numbers of the studies about this subject has been increased. Most of the studies about health and special education conducted in abroad reveals that peer tutoring method not only increases the success of the lessons but also affects positively social relations, attitudes and self esteems of the students. Also the conducted studies put forth that peer tutoring applications are more effective especially on students who have behavioral and emotional disorders (Bowman-Perrott et al., 2013).

It is examined in this study that whether the effective and good speech lessons which were given with peer tutoring method, works or not on the effective speech, academic achievement and the perceptual self-efficacy of university students. According to the results gained out of findings of research peer tutoring developed positively perceptual self-efficacy, academic achievement and effective speech abilities of the students. Also students commented on positive feedback about the peer tutoring applications. And this shows the qualitative data are supported with quantitative data.

The results of various researches which were conducted to evaluate the effects of peer tutoring method on the academic success, attitudes and social behaviors of middle school, high school and university students, are consistent with the results of this research. According to

this, in one research made by Franca et al. (1990) it is stated that positive changes are observed on self perception of middle school students, also positive developments are happened in the attitudes towards the courses and social relations of the students. In a similar way Tokgöz (2007) states that peer tutoring program affected positively to the achievements of the 6th grade students on science course but did not affect their attitudes to the course. Also in Demirel's study (2013) it is concluded that the peer tutoring positively affected the achievement on mathematic course and permanence of knowledge of students but did not have any effect on their attitudes to the course. However, Akay (2011) states that the peer tutoring method not only affects the achievement of 8th grade students on the course of math, but also affects positively the attitudes of the students to the math course. Yardım (2009) reports that the peer tutoring method established important cognitive and behavioral changes in the attitude and behavior of 9th grade student to the mathematic course. Crouch et al. (2007) concluded that the usage of peer tutoring method to the physics course develops the scientific reasoning and problem solving abilities of the students and they gathered the results of these experiences together as the principles to the application of peer tutoring.

The results of various studies to investigate the effects

of peer tutoring to reading and writing which are some of the basic language skills are parallels to the results of this research. According to this, it is identified in a study that the children who had peer tutoring are better in reading comprehension in comparison to the children who did not have peer tutoring (Fuchs et al., 1999). In a different research it is identified that the children who had peer tutoring, are more successful in word recognition, fluent reading and reading comprehension in comparison to the children who did not have peer tutoring (Fuchs and Fuchs, 2005). Güvey Aktan and Gültekin (2015) identified that students gained rich learning experiences on first learning of reading and writing with interactions related to peer tutoring during their reading and writing activities. Green et al. (2004), made a research investigating the effect of peer tutoring in identifying the reading mistakes and correcting of second level high risk readers. After a ten week long application it is revealed that the peer tutoring substantially reduced reading mistakes of the students and most of the students performing the application were pleased from this experience. Topping et al. (2011), the application applied on 80 students in Scotland which was performed with using paired reading technique revealed that it reduced the reading mistakes of the students and developed the students socially by increasing their self-esteems. Similarly, in the researches performed by Gür (2015) it is identified that the peer coaching technique has positive effect on writing proficiency of university students.

It is determined in literature that peer reviewing is an effective method in developing language skills as well as the peer tutoring. Temizkan (2009) searched the effect of peer reviewing on developing the speaking skills of university students and Hamzadayı and Çetinkaya (2011) searched also the effect of peer reviewing on writing skills of university students. The result of both of the studies revealed that peer reviewing activities can be used as efficient teaching activity in evaluating of the speaking and writing skills of the students. On the other hand, Hamzadayı and Çetinkaya (2011) stated that students commented positively about the effectiveness of peer feedbacks by means of structured information form.

CONCLUSION AND RECOMMENDATIONS

The results of this study reveal that peer tutoring is an effective method that can be used in the development of speaking skills. In accordance with the results the following are recommended:

1. Peer tutoring should be referred especially in relieving anxiety and stress based speech errors.
2. Peer tutoring, based on cooperation and applicable for the contemporary teaching approaches, should also be used in developing listening, reading and writing skills as well as speaking skills.
3. Studies that examine the effects of peer tutoring on

students' lingual, social and mental skills development should also be carried out besides its impact on their academic development.

4. Peer tutoring especially should be used as an effective method together with micro-teaching in developing the teaching skills of the students studying in the faculty of education.

5. The peer groups should be created homogeneously and the student requests should be taken into consideration. There should be students from all levels of success –high, intermediate, low- in each group.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

- Akay G (2011). The effect of peer instruction method on the 8th grade students' mathematics achievement in transformation geometry and attitudes towards mathematics. Unpublished master's thesis, Middle East Technical University, Institute of Science and Technology, Ankara.
- Ayvazo S, Aljadef-Abergel E (2014). Classwide peer tutoring for elementary and high school students at risk: listening to students'voices. *Support for Learning*, 29(1):76-92.
- Bowman-Perrott L, Davis H, Vannest K, Williams L (2013). Academic benefits of peer tutoring: A meta-analytic review of single-case research. *School Psychol. Rev.* 42(1):39-55.
- Britz MW, Dixon J, McLaughlin TF (1989). The effects of peer tutoring on mathematics performance: A recent review. *B. C. J. Spec. Education*, 13:17-33.
- Büyükoztürk Ş (2012). Sosyal bilimler için veri analizi el kitabı. İstatistik, araştırma deseni sspis uygulamaları ve yorum. Ankara: Pegem A Yayıncılık, Baskı. 16.
- Ceran D (2012). Turkish teachers attitudes towada the evaluation of speech training course. *Journal of Academic Social Science Studies*, 5(8):337-358.
- Creswell JW (2014). Research design, qualitative, quantitative and mixed methods approaches. (Çeviri Edt. Demir SB.). Ankara: Eğiten Yayınları.
- Crouch, CH, Watkins J, Fagen AP, Mazur E (2007). Peer instruction: engaging students one- on- one, all at once. *Rev. Phys. Educ. Res.* 1(1):1- 55.
- Çintaş Yıldız D, Yavuz M (2012). Study of developing effective speech scale. *Turkish studies - International periodical for the languages, Literature and History Turkish or Turkic*, 7(2):319-334.
- Demirci N, Çirkinöğlü AG (2009). The effect of peer instruction method to university students' electrostatics achievement and attitudes towards this method. *E-Journal of New World Sci. Acad. Educ. Sci.* 4(1):240-256.
- Demirel F (2013). The effect of using peer instruction in mathematic course on students' attitude, achievement and retention of knowledge. Unpublished master's thesis, Erciyes University, Institute of Education Sciences, Kayseri.
- Doğan Y (2009). Suggested activities to improve speaking skill. *Türk Eğitim Bilimleri Dergisi*, 7(1):185-204.
- Er S. (2010). Etkili ve güzel konuşma sanatı. İstanbul: Hayat Yayıncılık.
- Franca VM, Kerr MM, Reitz AL, Lambert D (1990). Peer tutoring among behaviorally disordered students: Academic and social benefits to tutor and tutee. *Education Treatment of Children*, 13(2):109-128.
- Fuchs D, Fuchs LS (2005). Peer-assisted. learning strategies: promoting word recognition, fluency, and reading comprehension in young children. *J. Special Educ.* 39(1):34-44.
- Fuchs LS, Fuch D, Kazdan S (1999). Effects of peer-assisted learning strategies on high school students with serious reading problems. *Remedial Special Educ.* 20(5):309-318.

- Gearheart BR, Weishahn MW, Gearheart CJ (1992). The exceptional students in regular classroom. New York: Meril.
- Gebeş H (2011). The effect of peer supported anger management training program on anger management skills of high school students. Unpublished master's thesis, Çukurova University, Social Sciences Institute, Adana.
- Green SK, Alderman G, Liechty A (2004). Peer tutoring, individualized intervention, and progress monitoring with at-risk second-grade readers, preventing school failure: Alternative education for children and youth 49(1):11-17.
- Gündüz O, Şimşek T (2014). Uygulamalı konuşma eğitimi. Ankara: Grafiker Yayınları.
- Gür T (2015). Effects of peer coaching technique on students writing skills in the university level. J. World Turks, 7(1):117-188.
- Güvey Aktay E, Gültekin M (2015). Peer collaboration and early reading and writing teaching. Trakya University, J. Soc. Sci. 17(1):291-309.
- Hamzadayı E, Çetinkaya G (2011). Peer feedbacks in revision of written expressions: feedback types, students' perceptions. J. Abant İzzet Baysal University Faculty Educ. 11(1):147-160.
- Hussain S, Anwar S, Majoka MI (2011). Effect of peer group activity-based learning on students' academic achievement in physics at secondary level. Int. J. Acad. Res. 3(1):940-944.
- Karakoç T (2002). Effectiveness of peer tutoring while teaching change comparison, classification problems in mathematics to students white visually impaired. Unpublished master's thesis. Gazi University, Institute of Education Sciences, Ankara.
- Karasar N (2012). Bilimsel araştırma yöntemi. Ankara: Nobel Yayıncılık.
- Katranlı M, Melanlıoğlu D (2013). An investigation into the validity and reliability of speaking self-efficacy scale for pre-service teachers. Int. J. Soc. Sci. 6(6):651-665.
- Kavcar C, Oğuzkan F, Sever S (2004). Türkçe öğretimi. Ankara: Engin Publishing.
- Kuru Gönen S İ (2012). A study on reflective reciprocal peer coaching: An application in pre-service English language teaching context. Unpublished doctoral dissertation. Anadolu University, Institute of Education Sciences, Eskişehir.
- Mazur E (1997). Peer instruction: A user's manual. New York: Prentice Hall.
- McKellar NA (1986). Behaviors used in peer-tutoring. J. Experimental Educ. 54(3):163-167.
- Moor D, Walters S (2014). Cross level peer tutoring to support students learning audio programming, AES 136th Convention, Berlin, Germany. 26-29:2-5.
- Naseerali MK (2013). Effectiveness of structured peer tutoring on the achievement in physics at secondary level. Innovative Thoughts Int. Res. J. 1(2). <http://files.eric.ed.gov/fulltext/ED559346.pdf> adresinden 08.02.2016 tarihinde indirilmiştir.
- Özbay M (2007). Türkçe özel öğretim yöntemleri II. Ankara: Öncü Kitap.
- Pulling A, Allen R (2014). Impact of a peer-tutoring course on skill performance, assessment, and instruction. Physical Educator 7(1):344-362.
- Rittschof KA, Griffin BW (2001). Reciprocal peer tutoring: Re-examining the value of a co-operative learning technique to college students and instructors. Educ. Psychol. 21(3):313-331.
- Robinson DR, Schofield JW, Wentzell KLS (2005). Peer and cross-age tutoring in math: Outcomes and their design implications. Educ. Psychol. Rev. 17(4):327-362.
- Savaş E (2012). Effect of the science process skills laboratory approach supported with peer-instruction on some of science process skills of pre-service teachers. Unpublished master's thesis, Balıkesir University, Institute of Science and Technology, Balıkesir.
- Temizkan M (2009). The effect of peer assessment on the development of speaking skill. Mustafa Kemal University J. Soc. Sci. Institute, 6(12):90-112.
- Temizyürek F, Erdem G, Temizkan M (2011). Konuşma eğitimi sözlü anlatım. Ankara: Pegem Yayınları.
- Tokgöz S (2007). The effect of peer instruction on sixth grade students' science achievement and attitudes. Unpublished doctoral dissertation, Middle East Technical University, Institute of Science and Technology, Ankara.
- Topping KJ (1996). The effectiveness of peer tutoring in further and higher education: A Typology and Review of the Literature. Higher Educ. 32(3):321-345.
- Topping KJ, Campbell J, Douglas W, Smith A (2003). Cross-age peer tutoring in mathematics with seven- and 11-years olds: Influence on mathematical vocabulary, strategic dialogue and self-concept. Educ. Res. 45(3):287-308.
- Topping KJ, Miller D, Thurston A, McGavock K, Conlin N (2011). Peer tutoring in reading in Scotland: Thinking big. Literacy 45(1):3-9.
- Yalçın A (2012). Türkçe öğretim yöntemleri yeni yaklaşımlar. Ankara: Akçağ Yayınları.
- Yardım HG (2009). An action research upon the effect of peer tutoring on 9th grade students in mathematics lessons. Unpublished master's thesis. Gazi University, Institute of Education Sciences, Ankara.
- Yelpaze İ (2012). The effectiveness of social skills training program told via peer tutoring on the level of aggression of secondary school students. Unpublished master's thesis. Gaziantep University, Social Sciences Institute, Gaziantep.
- Yıldız C (2008). Yeni öğretim programına göre kuramdan uygulamaya Türkçe öğretimi. Ankara: Pegem A Akademi.

Full Length Research Paper

Differences in meta-aesthetic consciousness in students taking fine arts, design and academy education

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Meta-aesthetics is the aesthetic field relating to the images of products where the conversion value, separate from the product's function, takes part directly in its value. Meta-aesthetics is among the subjects that today's art and design world must address more sensitively. This study was based on a 2009 dissertation measuring university students' awareness and understanding of meta-aesthetics. In 2014, the study was repeated using a different sample and was published as an essay in 2015. Using these data, this research compared the meta-aesthetic awareness of the group of students receiving art education and trained to be art educators in 2009, and another group of students trained as artists and designers receiving art and design education in 2014. The study found that neither the teenagers training as artists and designers nor the art educator students had full knowledge of the meta-aesthetic subjects of their awareness or of aesthetics. Aesthetic function of education, and especially art education, does not meet expectations to improve and crystallize students' aesthetic awareness. This research underlines the obligation of art and design education institutions to renew their focus on aesthetic subjects. It will serve as a resource for researchers concerned with the future of art and design education.

Key words: Art and design education, meta-aesthetic, visual arts and design, aesthetics, aesthetics education.

INTRODUCTION

Aesthetics is generally considered synonymous with art. It has been a major, organic component of life throughout the time that art has existed. Since the foundation of aesthetics as a scientific discipline, philosophers, including Baumgarten, agreed that aesthetics was determined by perception. Aesthetic perception focuses on the sense of pleasure or displeasure related to everything happening around us, including ourselves,

and it reflects our attitudes toward an art object. From the most tangible to the most intangible of art, from architecture to music, we engage aesthetically with the art object. Such susceptibility and awareness is so intuitive that whatever is necessary occurs by itself. However, conscious aesthetic attitudes can be improved through a quality education and environment.

Students in all academy and higher-education faculties

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providing art education are essentially taking consciousness and aesthetics education. Education on values and objects, constituting the axiological and subjective branches of aesthetics, may allow students to achieve substantial satisfaction. Fostering awareness of meta-aesthetics in students and reflecting on their attitudes is the basic objective of this research. This is a significant issue in the context of 21st century globalization. From the Bauhaus movement of 1919 to today, the creation and sale of industrial products with an aesthetic presentation has made aesthetics a key issue with respect to cultural values.

Aesthetics

The term “aesthetics” comes from the Greek words “aisthesis” or “aisthanesthai”. The word “aisthesis” means sensation or sensible perception, and the word “aisthanesthai” means perception through sensation (Tunali, 1998). Tunali (1998) stated that “the science of esthetics is to investigate susceptibility, *facultas cognoscitiva inferior* and downward cognition; right as the task of logic to investigate efficiency of mind, *facultas cognoscitiva superior* and upward cognition and to determine the rules of it” (Tunali, 1998).

The basic task of aesthetics is “beauty”. According to Tunali (1998), what we call an artwork or a beautiful thing is an artwork or beautiful thing only for a subject and for the aesthetic attitude or perception of that subject. While the existence of a subject is mandatory for the aesthetic phenomenon, it is not the unique bearer or determiner of the aesthetic phenomenon (Tunali, 1998). According to Hegel (1994), the beauty of art is superior to nature. “Art beauty is a beauty born from the spirit, it is a re-born beauty”. This expression implies that artistic beauty arises from the human mind, and is reproduced within the natural world by the human mind.

Traditional aesthetics deriving from Baumgarten, Kant and Hegel finds the research topics of “aesthetics” either in beauty or in art. This tradition describes natural and technical beauty as “dependent beauty” and separates this beauty from artistic beauty, described as “independent beauty”. Traditional aesthetics ties art only to the concept of “fine arts” and investigates fine arts (Tunali, 1998).

Arts and design education develops a student’s identity, consisting of the feelings, habits, attitudes, skills, and other characteristics required to be a balanced and sensorially aware human. Odenstedt (2008) criticized education as follows:

“Hegel argues that educated (gebildete) people are capable of ‘turning things (sachen) round and considering them in many aspects’.” This ability involves, Hegel says, a “power of keeping the manifold points of view present to the mind, so that the wealth of categories by which an

object may be considered [are grasped]” .

Consequently, in art education, education in the “beautiful” is important. In “Gadamer’s Aesthetics”, Davey (2011) states that “‘Substance’ is understood as something that supports us, although it does not emerge into the light of reflective consciousness, it is something that can never be fully articulated, although it is absolutely necessary for the existence of all clarity, consciousness, expression and communication”. Such an education is necessary to allow us to express ourselves most accurately and completely. To assume that aesthetic education will maintain its presence in the curriculum is naive, even though it is central to the art and design student’s personal development.

Topics of esthetics science and 20th century esthetic definitions

Topics of esthetics and the definitions made especially in and after the 20th century throughout the historical development of esthetics were included into the research in this section. Esthetic reality and basic problems addressed by the esthetics were also outlined in this section.

Esthetic reality

Esthetic reality is an esthetic philosophy composed of heterogeneous esthetic problems, and allowing establishing ontological foundations of today’s esthetics. Heterogeneous characteristics of esthetic reality express the different components and building stones of the esthetics. Each esthetic phenomenon is necessarily related to a *subject*. Such a subject participates into integrity of the esthetic phenomenon, esthetic asset as an *esthetic attitude* and as an *esthetic perception* (Tunali, 1998).

Esthetic asset does not rely only on the existence of the subject. In esthetic phenomenon, there is another asset toward which the subject is oriented in front of the subject participated into this phenomenon: Esthetic object (Tunali, 1998). Another asset creating the esthetic entity is the esthetic value or the beauty. Subject-object relationship is objectified as a judgement: Esthetic judgement (Tunali, 1998)

Esthetic subject/subjective esthetics

Esthetic subject imply a conscious asset, in other words the “self” sensing the esthetic object, comprehending it, esthetically enjoying it and having esthetic pleasure from it. Such an esthetic subject *develops an attitude* against the esthetic object while comprehending it and having

pleasure from it (Tunalı, 1998).

In modern esthetics, Croce is the pioneering philosopher exhibiting subjectivist attitudes. Cömert (2007) in a study investigating Croce Esthetics expressed the types of knowledge according to Croce as follows:

“There are two types of knowledge. The knowledge is either “intuitional or logical”; gained either through *imagination* or through *senses*; it is either the knowledge of *individual* or the knowledge of *universal*; it is either the knowledge of *single things* or the knowledge of *relationships* among those things; in brief, the producer of either *images* or *concepts*”.

Timuçin (2005) in his work defined the perception according to Bergson as “the sensual affinity allowing us tend to inside of the object to coincide with the unique and unexplainable one”. Based on the expressions, it is possible to mention about the relationship between esthetic attitude and the senses. Subjectivist attitude also known as identification (einfühlung) and expressed as “internal sensation, transfer of own senses to the objects; putting oneself into design world of another one; feeling oneself inside of an art work” (TDK, www.tdk.gov.tr) constitutes the essence of esthetic life.

Esthetic objects/objectivist esthetics

Esthetic object expresses an asset to which a subject get into a relevance. Objectivist esthetics is a perspective putting an art work and its asset layers in front of psychologist attitude.

A art work is an “artificial” thing. However, not only the art work but also the other technical products are all artificial. Technique come forefront as a significant competitor against the art of the 20th century. Technical goods have also functional targets beside their beauties. The most distinctive characteristic distinguishing an artificial art work from an artificial technical product is the fact that art works are not fabricated as the technical goods. Apart from that, while esthetic beauty is the primary objective in an art work, it is not the primary target in a technical product. Functionality is the primary target in a technical product. Right at this point, when looking abck at the notes of Tunalı (2003), we face the following efficient statement:

“The standing principle of an art work is *freedom*. On the other hand, the standing principle of a technical product is *necessity*”.

According to Marxism, both the human and human mind are the products of history and society. Marx (2006) in his work of “Capital III” expressed that capitalist production process was historically defined as the type of social production process. According to Marx:

“Social existence of humans is not the conscious,

contrarily the conscious of humans is their social existence.” (Tunalı, 2003).

According to Tunalı (2003), together with socialization and freedom of humans, a new asset is born by the human over the nature. This asset is a culture asset. Culture stars with the freedom of human from the nature and natural necessities. In place where culture exists, independent human shows up.

Esthetic value/axiological esthetics

Esthetic apprehension of an esthetic subject of an esthetic object, in other words value assign creates the “esthetic value”. As it was in general sense, some philosophers and estheticians defines the beauty through comparisons with the adjectives such as *nice*, *beneficial*, *good*, *right* (or *real*) while mentioning about the beauty or they also define with some esthetic concepts such as *pleasant*, *luxurious* and *gorgeous* (Sena, 1972).

Esthetic judgement/logic esthetics

Judgement is concept rejecting or approving the established relationship between two concepts or two terms. Esthetic judgments are not objective but subjective judgments. “In any case, subjectivity of a like-judgement means total subjectivity of it” (Tunalı, 1998).

Ludwig Wittgenstein took the issue one step further. According to Wittgenstein, “It is remarkable to point out that esthetic attributes such as “beautiful”, “fine”, “gracious” do not play ay roles in real life in which we present esthetic judgments” (Tunalı, 1998). Again according to Wittgeinstein, the attributes used for art works such as “good”, “nice”, “beautiful”, “ugly” do not have any meanings since they don’t have any *criterion* to stand for. Such criterions are to be *proper*. In other words, beforeone present esthetic judgement, it is necessary to know about the rules or norm of that object. In broader sense; the necessity of resolving asset layers in ontic integrity of an esthetic asset may be considered a way or solution to establish an objective criterion about that object.

Meta-Aesthetics

Marxist aesthetics is key to understanding meta-aesthetics, and it is mentioned in objectivist aesthetics. Marxist aesthetics specifies the aesthetic object’s relation to a consumption category.

Marx argues that there are significant distinctions among human activity-induced objects, treating targets and objectives as an “absolute nature object”. According to Marx, the object of an activity recovers from being an

ordinary object—a natural asset—and becomes a product of human activity. “The product separates from sole natural object as a product but become a product in consumption. To be a consumption object means the tendency and participation of human activity to it. Tendency of human action and activity to an existing one implies the humanization of that one. The object as a product is social-historical object” (Tunalı, 2003). Meta-aesthetics depends on the type of ‘meta’, a component that is functionally specified by exchange values. Haug (1997) defines meta-aesthetics and its functions as follows:

“In one hand, the “beauty” in another Word an appearance appealing the senses; on the other hand a design impelling the purchasing reflects and looker desires to own that meta. Well-appearance of the meta to the people puts the sensual perceptions of them into action and then sensual benefits determinates over it. Conversion of beneficial objects into meta triggers instinctual responses and consequently functional tools to renew or reshape not only the humanitarian sensitivity but also the world sensual objects is arisen. Therefore, the concept of “reshape of sensitivity” became a significant issue”.

Given the critical role meta-aesthetic education plays in student development, the objective of this study was to determine the effects of demographic characteristics and art/design education on the meta-aesthetic awareness of students studying in art, design, and education faculties.

Esthetic value in art education

Esthetic apprehension of the esthetic subject of an esthetic object—in other words, value assignment—creates “esthetic value”. In a general sense, some philosophers and estheticians define beauty through comparison with adjectives such as *nice*, *beneficial*, *good*, *right* (or *real*), or they may define beauty with esthetic concepts such as *pleasant*, *luxurious* and *gorgeous* (Sena, 1972).

MATERIALS AND METHODS

The present study was developed from a 2009 PhD thesis researching 409 senior-year students in the art and design teacher departments of education faculties. To compare the results, artist/designer candidates were evaluated with a similar scale. Thus, 126 students taking fine arts and design education were subjected to the same attitude scale (Tataroğlu, 2015). The meta-aesthetic awareness levels of students in fine arts education and academy education might differ. Investigation of such differences and their causes make the present research and findings significant.

Research model

The present research follows a general screening model, with a

quantitative self-administered questionnaire ‘school survey’ design.

Location and sample

The research was conducted at Gazi University, located in Ankara, during the 2008 to 2009 school year. The research sample consisted of senior students of Art Education, Department of Fine Arts Education, Department of Gazi Education Faculty; senior students of Clothing Industry and Fashion Design, Handcrafts and Practical Arts Education, Department of Professional Education Faculty; senior students of Technical Drawing and Computer-Aided Design Education and Industrial Technology Education, Department of Industrial Arts Education Faculty; senior students of Furniture and Decoration Education, Department of Technical Education Faculty; and finally, students in the Fine Art Faculties of the foundation universities located in Ankara during the 2013 to 2014 academic year. In this category, there were six universities offering fine arts education. The research sample consisted of 126 students studying at the Fine Arts Design and Architecture Faculty of Baskent University. During this academic year, there were 437 students in the faculty. Students who had already taken the courses of “basic art/design education” and “aesthetics” were considered for the research sample.

Data gathering techniques

Sample students were administered a developed attitude scale. The scale assessed student attitudes regarding the current status of meta-aesthetics in art/design education, current beliefs about the necessity of meta-aesthetics with regard to aesthetic consciousness, and awareness of the relationships of meta-aesthetics with fashion, design and technology.

Development of the data gathering tool

The data gathering tool was an adaptation of the items of the attitude scale, which underwent validity–reliability testing in 2009, to art and design education. The revised scale also underwent validity–reliability testing and the scale validity and reliability were demonstrated statistically.

Data analysis

Data analysis was performed by statistical package for social sciences (SPSS) 11.0 statistical software (SPSS Inc., Chicago, IL) and frequency tables were created for each variable.

RESULTS AND DISCUSSION

Results for the Faculty of Fine Arts are indicated by 1-ARTS and results for the Faculty of Education are indicated by 2-EDU.

1. All the responses given to attitude scale items were “valid”.
2. Given the students’ participation in the questions and substances (the items of the attitude scale), the greatest number of missing replies were found in the section where they write their score when entering the program for training. Students left more unanswered questions in

Table 1. Gender.

Gender	Female n (%)	Male n (%)	Complete Responses (n) (%)
1 (ARTS)	76 (60.3)	50 (39.7)	126 (100.0)
2 (EDU)	312 (76.4)	96 (23.5)	408 (100.0)

Table 2. Age.

Age	18 n (%)	19 n (%)	20 n (%)	21 n (%)	22 n (%)	23 n (%)	24 n (%)	-	-
1(ARTS)	1 (.8)	5 (4.0)	13 (10.3)	15 (11.9)	21 (16.7)	30 (23.8)	17 (13.5)	-	-
2 (EDU)	1 (.2)	4 (1.0)	17 (4.2)	61 (15.0)	95 (23.3)	75 (18.4)	46 (11.3)	-	-
								-	-
Age	25 n (%)	26 n (%)	27 n (%)	28 n (%)	29 n (%)	30 n (%)	32 n (%)	33 n (%)	Complete responses (n) (%)
1 (ARTS)	16 (12.7)	2 (1.6)	1 (.8)	-	2 (1.6)	2 (1.6)	1 (.8)	-	126 (100.0)
2 (EDU)	37 (9.1)	23 (5.6)	4 (1.0)	9 (2.2)	1 (.2)	-	-	1 (.2)	408 (100.0)

Table 3. University level.

University year	1 n (%)	2 n (%)	3 n (%)	4 n (%)	Complete responses (n) (%)
1 (ARTS)	46 (36.5)	26 (20.6)	21 (16.7)	33 (26.2)	126 (100.0)
2 (EDU)	All of the students were in 4th year				

articles five and six than in other sections.

Frequency tables of demographic characteristics

Gender

1. Of students participating in the attitude scale, 60.3% were female and 39.7% were male.
2. Of students participating in the attitude scale, 312 (76.5%) were female and 96 (23.5%) were male (Table 1).

Age

1. Of the participating students, 15.1% were 18 to 20 years of age; 78.6% were 21 to 25 years; 5.2% were 26 to 30 years, and 0.8% were 31 to 35 years of age.
2. Of the participating students, 5 (1%) were 18 to 19 years of age, 78 (20%) were 20 to 21 years of age, 170 (45%) were 22 to 23 years of age, 83 (22%) were 24 to 25 years of age, and (1%) were 26 years and over (Table 2).

University level

1. Of the participant students, 36.5% were registered as

1st year students, 20.6% as 2nd year students, 16.7% as 3rd year students, and 26.2% as 4th year students (Table 3).

Highest maternal educational level

1. Among mothers of the participant students, 2.4% did not have any formal education, 12.7% had primary and secondary school education, 43.7% had high school education, 4.8% had vocational collage education, 30.2% had undergraduate education and 6.3% had graduate education.
2. Among mothers of the participant students, 34 (8.3%) were uneducated, 251 (61.5%) were primary school graduates, 47 (11.5%) were secondary school graduates, 52 (12.7%) were high school graduates, 3 (7%) were associate degree graduates, 17 (4.2%) had undergraduate degrees, and 2 (5%) had graduate degrees (Table 4)

Highest paternal educational level

1. Among fathers of the participating students, 34.2% had primary and secondary school education, 30.2% had high school education, 6.3% had vocational collage education, 38.9% had undergraduate education and 11.9% had

Table 4. Highest maternal educational level.

Maternal education level	Uneducated n (%)	Primary school n (%)	Secondary school n (%)	High school n (%)	Vocational college n (%)	Undergraduate n (%)	Graduate n (%)	Complete responses (n) (%)
1 (ARTS)	3 (2.4)	12 (9.5)	4 (3.2)	55 (43.7)	6 (4.8)	38 (30.2)	8 (6.3)	126 (100.0)
2 (EDU)	34 (8.3)	251 (70.2)	47 (11.5)	52 (12.7)	3 (0.7)	17 (4.2)	2 (0.5)	408 (100.0)

Table 5. Highest paternal educational level.

Paternal education level	Uneducated n (%)	Primary school n (%)	Secondary school n (%)	High school n (%)	Vocational college n (%)	Undergraduate n (%)	Graduate n (%)	Complete responses (n) (%)
1 (ARTS)	-	11 (8.7)	5 (4.0)	38 (30.2)	8 (6.3)	49 (38.9)	15 (11.9)	126 (100.0)
2 (EDU)	10 (2.5)	163 (40.0)	77 (18.9)	89 (21.8)	15 (3.7)	48 (11.8)	5 (1.2)	407 (100)

Table 6. Parental style.

Parental style	Democratic n (%)	Authoritarian n (%)	Lenient n (%)	Complete responses (n) (%)
1 (ARTS)	92 (73.0)	26 (20.6)	8 (6.3)	126 (100.0)
2 (EDU)	314 (77.0)	78 (19.1)	13 (3.2)	405 (99.3)

Table 7. Area of study expectations.

Area of study expectations	Exceeds expectations n (%)	Meets expectations n (%)	Below expectations n (%)	Complete responses (n) (%)
1 (ARTS)	3 (2.4)	64 (50.8)	59 (46.8)	126 (100.0)
2 (EDU)	6 (1.5)	82 (20.1)	319 (78.2)	407 (100)

graduate education.

2. Among fathers of the participating students, 2.5% were uneducated, 40% were primary school graduates, 18.9% were secondary school graduates, 21.8% were high school graduates, 3.7% had vocational college education, 11.8% had an undergraduate degree, and 1.2% had a graduate degree (Table 5).

Parental style

1. Among the parents of participant students, 73% were democratic, 20.6% were authoritarian and 6.3% were lenient.

2. Three hundred and fourteen (77%) participant students reported their parents as democratic, 78 (19.1%) as authoritarian and 13 as lenient (Table 6).

Area of study expectations

1. Of the participant students, 2.4% reported that their

area of study exceeded their expectations, 50.8% reported that it met their expectations, and 46.8% stated that it was below their expectations.

2. Of the participant students, 6 (1.5%) reported that their area of study exceeded their expectations, 82 (20.1%) reported that it met their expectations, and 319 (78.2%) reported that it was below their expectations (Table 7).

Frequency tables of section two (opinions about course contents)

Opinions about course contents

Item 1: *Art and design course contents were able to teach me artistic design principles both theoretically and practically*

1. Of the participant students, 57.1% agreed that art and design courses were able to teach them artistic design principles both theoretically and practically. About 24.6% were undecided. Uncertainty that course contents were being successfully taught may be considered a negative

response, in which case the percentage of students responding negatively was 44.9%. In this case, almost half of the students responded positively and the other half negatively for this item.

2. Of the participant students, 43.4% agreed that art and design courses were able to teach them artistic design principles both theoretically and practically. About 31.9% were undecided. 27% disagreed.

Item 2: *Art education courses did not have contents that allowed me to use my creativity and composition knowledge*

1. Of the participant students, 24.6% offered undecided, 65% supportive responses, agreeing that the art education courses allowed them to use their creativity and composition knowledge, while 10.3% disagreed with this item.

2. There is little difference in percentage between “disagree” (41.7%) and “agree” (35%) responses, while the percentage of “undecided” (22.3%) responses was relatively large. More students felt that course activities allowed them to use their creativity, but such close percentages suggest that students divide into two poles on this item.

Item 3: *I think that the content of the art and design courses qualifies us to be artists or designers*

1. Of participant students, 56.4% believed that the courses they took qualified them to play the role of an artist or designer properly, while 43.7% were undecided.

2. Here, the relationship between the quality of art education and the role of art producer or consumer was suggested. Considering student opinions and the attitudes they developed, the percentage of students who agreed (31.7%) and disagreed (37.5%) were almost equal, while as in previous items the percentage of undecided students (29.9%) was remarkably high.

Item 4: *I think we have received sufficient education about the importance and necessity that aesthetic values bear the characteristics of our culture.*

1. Of the participant students, 49.2% responded positively, while 50.2% were undecided or responded negatively. Almost half of the students indicated that the education they received was insufficient on aesthetic values and the importance and function of these values.

2. The majority of participant students (50.3%) responded that sufficient education was not provided.

Item 5: *I think art teachers exhibited sufficient sincerity and sensitivity in teaching art*

1. This item evaluates sincerity and sensitivity in the attitudes of art trainers toward students and courses. The summed percentage of undecided and negative student

responses was 40.5%. Such a high percentage of dissatisfaction should be thought-provoking for art teachers.

2. Of participant students, 24 (5.9%) replied “totally agree”, 114 (27.9%) “agree”, 135 (33.1%) “undecided”, 110 (27%) “disagree” and 110 (5.1%) “totally disagree”.

Item 6: *I don't think aesthetic and meta-aesthetic topics were sufficiently present in the course contents of my education program.*

1. This item questions the sufficiency of aesthetic and meta-aesthetic topics within the education program. Of participant students, 42% reported insufficient treatment of aesthetic and meta-aesthetic topics. The sum of undecided and positive responses was 70.3%.

2. Of participant students, 16 (3.9%) replied “totally agree”, 82 (20.1%) “agree”, 125 (30.6%) “undecided”, 142 (34.8%) “disagree” and 39 (9.6%) “totally disagree” n (Table 8).

Frequency tables of section three (opinions about consumption)

Opinions about consumption

Item 1: *I don't feel uncomfortable buying products simply because they are “easy” on my senses or even when I know that false advertising is used.*

1. This item questions student purchasing behavior even with knowledge of the exaggerated or falsified advertisement of an item. Of participant students, 51.2% responded positively, 24.6% were undecided and 23.8% responded negatively to this item. The total of combined undecided and positive responses comprised 76.2%. This degree of comfort with aesthetic manipulation suggests that students are not sufficiently conscious about the training of their senses.

2. Of the participant students, 39.4% responded positively, 15.2% were undecided and 43.9% responded negatively.

Item 2: *The appearance of a product to be purchased is more important than its functions.*

1. Of the participant students, 37.3% responded positively, prioritizing appearance, while 40.7% prioritized functions and 22.2% were undecided.

2. Of the participant students, 57.3% prioritized appearance, 24% prioritized functions and 17.2% were undecided.

Item 3: *I care about buying products with advertisements.*

1. This item evaluates the role of advertising in student buying preferences. Of the participant students, 54.1%

Table 8. Opinions about course contents.

Opinions about course contents		Totally disagree n (%)	Disagree n (%)	Undecided n (%)	Agree n (%)	Totally agree n (%)	Complete responses (n) (%)
Item 1	1	4 (3.2)	9 (7.1)	31 (24.6)	72 (57.1)	10 (7.9)	126 (100.0)
	2	25 (6.1)	81 (19.9)	130 (31.9)	144 (35.3)	25 (6.1)	405 (99.3)
Item 2	1	4 (3.2)	9 (7.1)	31 (24.6)	72 (57.1)	10 (7.9)	126 (100.0)
	2	26 (6.4)	144 (35.3)	91 (22.3)	125 (30.6)	18 (4.4)	404 (99.0)
Item 3	1	3 (2.4)	18 (14.3)	34 (27.0)	64 (50.8)	7 (5.6)	126 (100.0)
	2	37 (9.1)	116 (28.4)	122 (29.9)	112 (27.5)	17 (4.2)	404 (99.0)
Item 4	1	5 (4.0)	32 (25.4)	27 (21.4)	50 (39.7)	12 (9.5)	126 (100.0)
	2	10 (2.5)	81 (19.9)	108 (26.5)	172 (42.2)	33 (8.1)	404 (99.0)
Item 5	1	17 (13.5)	58 (46.0)	28 (22.2)	16 (12.7)	7 (5.6)	126 (100.0)
	2	21 (5.1)	110 (27.0)	135 (33.1)	114 (27.9)	24 (5.9)	404 (99.0)
Item 6	1	5 (4.0)	32 (25.4)	36 (28.6)	42 (33.0)	11 (8.7)	126 (100.0)
	2	39 (9.6)	142 (34.8)	125 (30.6)	82 (20.1)	16 (3.9)	404 (99.0)

preferred advertised products, 44.4% did not, and 21.4% were undecided. The percentages were close to each other for this item.

2. Of the participant students, 25.7% responded positively, 20.6% were undecided and 52% responded negatively.

Item 4: *I think that changes only made to the packaging of an item trick consumers.*

1. Of the participant students, 61.1% indicated that changes to the packaging of an item tricks consumers, 18.3% disagreed, and 27.8% were undecided.

2. Of the participant students, 69.1% indicated that changes to the packaging of an item tricks consumers, 15.7% disagreed, and 13.7% were undecided.

Item 5: *Because of my art and design education, I initially look for the aesthetic integrity and uniqueness of an item that I purchase*

1. This question evaluated the effect of art and design education on purchasing preferences, with 78.2% of participant students looking for integrity and uniqueness, 19% undecided, and 12.7% responding negatively.

2. Of the participant students, 65.7% responded positively, 17.9% were undecided and 14.7% responded negatively.

Item 6: *I think the institutions providing basic art and design education and training artists and designers are insufficient in creating conscious art consumers*

1. Of the participant students, 52.4% found the institutions

insufficient, 29.4% were undecided and 18.3% disagreed that institutions were insufficient in raising conscious art consumers.

2. Of the participant students, 50.7% agreed, 29.7% were undecided and 18.1% disagreed (Table 9).

Frequency tables of section four (opinions about production)

Opinions about production

Item 1: *I am hearing the concept of “meta-aesthetics” for the first time*

1. Of the participant students, 56.4% indicated that they were hearing the concept of “meta-aesthetics” for the first time when taking the survey, while 38.1% indicated that they were not hearing the concept for the first time and 5.6% were undecided.

2. Of the participant students, 101 (24.8%) responded “totally agree”, 135 (33.1%) “agree”, 48 (11.8%) “undecided”, 76 (18.6%) “disagree” and 40 (9.8%) “totally disagree”.

Item 2: *I think aesthetic appearance and functionality are equally and highly important in the design of every utility-purpose product*

1. This item solicits a comparative evaluation about the appearance and sales values of an item. Of the participant students, 76.2% agreed that appearance and

Table 9. Opinions about consumption.

Opinions about consumption		Totally Disagree n (%)	Disagree n (%)	Undecided n (%)	Agree n (%)	Totally Agree n (%)	Complete responses (n) (%)
Item 1	1	10 (7.9)	20 (15.9)	31 (24.6)	51 (40.5)	14 (11.1)	126 (100.0)
	2	35 (8.6)	144 (35.3)	62 (15.2)	129 (31.6)	32 (7.8)	402 (98.5)
Item 2	1	16 (12.7)	35 (27.8)	28 (22.2)	44 (34.9)	3 (2.4)	126 (100.0)
	2	63 (15.4)	171 (41.9)	70 (17.2)	74 (18.1)	24 (5.9)	402 (98.5)
Item 3	1	14 (11.1)	42 (33.3)	27 (21.4)	34 (27.0)	9 (7.1)	126 (100.0)
	2	51 (12.5)	161 (39.5)	84 (20.6)	93 (22.8)	12 (2.9)	401 (98.3)
Item 4	1	1 (0.8)	13 (10.3)	35 (27.8)	57 (45.2)	20 (15.9)	126 (100.0)
	2	20 (4.9)	44 (10.8)	56 (13.7)	193 (47.3)	89 (21.8)	402 (98.5)
Item 5	1	3 (2.4)	13 (10.3)	24 (19)	57 (45.2)	29 (23)	126 (100.0)
	2	14 (3.4)	46 (11.3)	73 (17.9)	188 (46.1)	80 (19.6)	401 (98.3)
Item 6	1	2 (1.6)	21 (16.7)	37 (29.4)	43 (34.1)	23 (18.3)	126 (100.0)
	2	18 (4.4)	56 (13.7)	121 (29.7)	156 (38.2)	5 (12.5)	402 (98.5)

sales values were equally and highly important, 11.9% were undecided and another 11.9% responded negatively.

2. Of the participant students, 105 (25.7%) replied “totally agree”, 193 (47.3%) “agree”, 62 (15.2%) “undecided”, 30 (7.4%) “disagree” and 10 (2.5%) “totally disagree”.

Item 3: *In a product with which I express myself, I don't care about the interests and needs of the masses with whom I share that item*

1. Of the participant students, 28.5% indicated that they do not care about other consumers' interests and needs, 57.2% indicated that they do care, and 14.3% were undecided. A 42.8% total percentage of negative and undecided is ethically thought-provoking.

2. Of the participant students, 19 (4.7%) replied “totally agree”, 67 (16.4%) “agree”, 72 (17.6%) “undecided”, 168 (41.2%) “disagree” and 74 (18.1%) “totally disagree”.

Item 4: *Advertising for a product I designed may be deceptive and may not sufficiently reflect that product. However, I don't feel uncomfortable if the advertisement is effective and is allows me to access the target market and receive their money*

1. This item was placed into the scale to evaluate the ethical attitudes of student designers regarding their own designs, advertisements and money. Of the participant students, 38.1% agreed that they preferred to gain money and mass targets, 32.5% reported discomfort, and 29.4% were undecided. In this item, the 61.9% agree–undecided majority was remarkable; unfortunately, they were placing meta in front of the value.

2. Of the participant students, 25 (6.1%) replied “totally agree”, 98 (24.5%) “agree”, 112 (27.5%) “undecided”, 113 (27.7%) “disagree” and 52 (12.7%) “totally disagree”.

Item 5: *It is possible to secretly influence people and to impart elements of a culture*

1. This item was written to foreground the aesthetic impact of meta-aesthetics. Of the participant students, 85.4% agreed, 18.3% were undecided and 6.4% disagreed.

2. Of the participant students, 64 (15.7%) replied “totally agree”, 188 (46.1%) “agree”, 95 (23.3%) “undecided”, 46 (11.3%) “disagree” and 7 (1.7%) “totally disagree”.

Item 6: *I wish to be an artist or a designer known by everyone*

1. This item evaluates the students' reputation attitudes. Of the participant students, 74.6% cared about reputation, 14.3% were undecided and 11.1% did not care about being an artist or designer known by everybody.

2. Of the participant students, 141 (34.6%) replied “totally agree”, 126 (30.9%) “agree”, 90 (22.1%) “undecided”, 26 (6.4%) “disagree” and 17 (4.2%) “totally disagree” (Table 10).

Frequency tables of section five (opinions about creativity)

Opinions about creativity

Item 1: *I think developing anything to fulfill human needs also requires creativity*

Table 10. Opinions about production.

Opinions about production		Totally Disagree n (%)	Disagree n (%)	Undecided n (%)	Agree n (%)	Totally Agree n (%)	Complete responses (n) (%)
Item 1	1	13 (10.3)	35 (27.8)	7 (5.6)	53 (42.1)	18 (14.3)	126 (100.0)
	2	40 (9.8)	76 (18.6)	48 (11.8)	135 (33.1)	101 (24.8)	400 (98.0)
Item 2	1	4 (3.2)	11 (8.7)	15 (11.9)	67 (53.2)	29 (23.0)	126 (100)
	2	10 (2.5)	30 (7.4)	62 (15.2)	193 (47.3)	105 (25.7)	400 (98.0)
Item 3	1	22 (17.5)	50 (39.7)	18 (14.3)	28 (22.2)	8 (6.3)	126 (100.0)
	2	74 (18.1)	168 (41.2)	72 (17.6)	67 (16.4)	19 (4.7)	400 (98.0)
Item 4	1	10 (7.9)	31 (24.6)	37 (29.4)	38 (30.2)	10 (7.9)	126 (100.0)
	2	52 (12.7)	113 (27.7)	112 (27.5)	98 (24.0)	25 (6.1)	400 (98.0)
Item 5	1	1 (0.8)	7 (5.6)	23 (18.3)	64 (50.8)	31 (24.6)	126 (100.0)
	2	7 (1.7)	46 (11.3)	95 (23.3)	188 (46.1)	64 (15.7)	400 (98.0)
Item 6	1	1 (0.8)	13 (10.3)	18 (14.3)	36 (28.6)	58 (46.0)	126 (100)
	2	17 (4.2)	26 (6.4)	90 (22.1)	126 (30.9)	141 (34.6)	400 (98.0)

1. This item evaluates the effects of meta-aesthetics in manipulations related to human needs. Of the participant students, 84.1% agreed on the importance of creativity, 8% disagreed and 7.9% were undecided.

2. Of the participant students, 141 (34.6%) replied "totally agree", 197 (48.3%) "agree", 36 (8.8%) "undecided", 18 (4.4%) "disagree" and 8 (2%) "totally disagree".

Item 2: *I think knowledge of meta-aesthetics by creative individuals is both necessary and significant in culture transfer*

1. This item investigates the role of meta-aesthetics in culture transfer. None of the students indicated total disagreement with this item. Of the participant students, 70.7% agreed with this opinion, 26.2% were undecided and only 3.2% indicated disagreement.

2. Of the participant students, 64 (15.7%) replied "totally agree", 170 (41.7%) "agree", 143 (35%) "undecided", 19 (4.7%) "disagree" and 4 (1%) "totally disagree".

Item 3: *I think advertising is necessary to introduce an item developed through my creativity (artwork/design items) to large masses*

1. This item evaluates attitudes toward the effects of advertising on the publicity of an item. Of the participant students, 75.5% responded positively, 7.9% responded negatively and 16.7% were undecided. No students totally disagreed with this item.

2. Of the participant students, 131 (32.1%) replied "totally agree", 181 (44.4%) "agree", 59 (14.5%) "undecided", 23 (5.6%) "disagree" and 5 (1.2%) "totally disagree".

Item 4: *I think the material value assigned to an artwork commoditizes the art*

1. This item questions the relationship between meta-aesthetics and money. Of the participant students, 54.8% agreed that money commoditized the art, 32.5% were undecided and 12.7% disagreed.

2. Of the participant students, 60 (14.7%) responded "totally agree", 115 (28.2%) "agree", 176 (43.1%) "undecided", 42 (10.3%) "disagree" and 7 (1.7%) "totally disagree".

Item 5: *The objective of making money moves the artist away from artistic creativity*

1. This item was included to point out that creativity is not a material value. Of the participant students, 59.9% indicated that the objective of making money moved artists away from creativity; 23.8% were undecided in this item and 16.7% indicated that artistic creativity was not decreased by the desire to make money.

2. Of the participant students, 113 (27.7%) replied "totally agree", 141 (34.6%) "agree", 78 (19.1%) "undecided", 57 (14%) "disagree" and 10 (2.5%) "totally disagree".

Item 6: *The most remarkable difference between an artwork and a design item is the uniqueness of the design item.*

1. This item points out a remarkable difference between artwork and design items. Of the participant students, 64.3% indicated that they knew about this difference; 15.9% disagreed, arguing for the uniqueness of artwork

Table 11. Opinions about creativity.

Opinions about production		Totally disagree n (%)	Disagree n (%)	Undecided n (%)	Agree n (%)	Totally agree n (%)	Complete responses (n) (%)
Item 1	1	4 (3.2)	6 (4.8)	10 (7.9)	66 (52.4)	40 (31.7)	126 (100.0)
	2	8 (2)	18 (4.4)	36 (8.8)	197 (48.3)	141 (34.6)	400 (98.0)
Item 2	1	-	4 (3.2)	33 (26.2)	68 (54.0)	21 (16.7)	126 (100.0)
	2	4 (1.0)	19 (4.7)	143 (35.0)	170 (41.7)	64 (15.7)	400 (98.0)
Item 3	1	-	10 (7.9)	21 (16.7)	63 (50)	32 (25.4)	126 (100.0)
	2	5 (1.2)	23 (5.6)	59 (14.5)	181 (44.4)	131 (32.1)	399 (97.8)
Item 4	1	3 (2.4)	13 (10.3)	41 (32.5)	47 (37.3)	22 (17.5)	126 (100.0)
	2	7 (1.7)	42 (10.3)	176 (43.1)	115 (28.2)	60 (14.7)	400 (98.0)
Item 5	1	14 (11.1)	7 (5.6)	30 (23.8)	54 (42.9)	21 (16.7)	126 (100.0)
	2	7 (1.7)	42 (10.3)	176 (43.1)	115 (28.2)	60 (14.7)	400 (98.0)
Item 6	1	2 (1.6)	18 (14.3)	25 (19.8)	53 (42.1)	28 (22.2)	126 (100.0)
	2	11 (2.7)	51 (12.5)	110 (27.0)	163 (40.0)	65 (15.9)	400 (98.0)

and 19.8 were undecided in this item.

2. Of the participant students, 65 (15.9%) replied “totally agree”, 163 (40%) “agree”, 110 (27%) “undecided”, 51 (12.5%) “disagree” and 11 (2.7%) “totally disagree” (Table 11).

CONCLUSIONS AND RECOMMENDATIONS

The data in this study were derive from extensive representative samples of university students. The essence of this research is the necessity of art, the necessity of education, and the function of art education in integrating education and human experience. The first step of this research was a PhD dissertation, and the second step centered on the analysis of art and design students about 5 years after the dissertation. The study provides data on the degree that art education fulfills the duty of art, both as producer (artistic creation) and consumer.

In the current study, demographic traits are evaluated, which is intended to provide information and insight about the student population. Subsequent research will involve comparing demographic features with the attitude items to evaluate results for statistical significance. The results are evaluated in two stages, corresponding with the structure and purpose of this research.

For academy students

The following conclusions can be drawn from student

responses. The majority of the participants were female students students with ages between 22 and 25 years. Most of them were first year students in the Interior Architecture and Environmental Design Department. While students’ fathers mostly had undergraduate and graduate level education, their mothers mostly had high school education.

Students more closely agreed when they were asked about the teachers from whom they took art education. However, more remarkable than such an agreement was the percentage of undecided students; it was more than the total of students who agreed and disagreed. This indicates that students were not able to develop an attitude about the quality of the teachers with whom they studied for 4 years and they were not able to assign a “value” to them.

The majority of students agreed that advertisement was necessary for designs and works to become known. As observed earlier, most students believe that advertising is necessary for public awareness. Therefore, student opinions were consistent with their opinions about advertisements. Students were not able to present an overall attitude, given their undecidedness about the commodification of art, but they were aware that artistic creativity and consequent works and products may not have an economic–practical objective. The teacher candidate senior students were having difficulty transferring a concept they were aware of into their daily lives, and exhibited undisciplined and unprincipled attitudes.

A majority of the students agreed upon the necessity of creativity in product creation and design being able to

affect individuals' senses. A majority of the students were aware that it was possible to influence individuals' desires through packages and "fashion", and to impart elements of other cultures through media channels.

Students indicated supportive opinions on many items in a group fashion, resulting in conflicting outcomes for many items. Students converged on authenticity, multiplication and advertisement of art or design items, however most students exhibited attitudes disregarding ethical values for professional or financial advancement.

For education department students

Proposals related to each conclusion are located immediately below the conclusion. The majority of students in this sample of 4th year students were females aged 22 to 23 years. Majority of students are enrolled in regular education, and the education status of their parents was generally primary education. Student opinions are also predictors of their attitudes. A majority of the students agreed that aesthetic and meta-aesthetic topics were not sufficiently included in course contents. However, as in the previous sample, a substantial portion of these students were undecided on this item.

A substantial portion of the participant students stated that they do not feel uncomfortable buying products even when they know about false advertisements or just because they are "easy" on their senses. The opposite opinion was expressed by another group of the students. Haug (1997) stated the following about the delusiveness of appearances:

"The mission of meta-aesthetics is to discover the ways to get into the minds of humans, the ways through which nothing else get into; a thing about which talkable, a thing that is visible, a thing that is not forgettable, a thing desired by everyone and every time..." (Haug 1997, 60) He subsequently advanced this case further: "Aesthetic style is used by the capital as a prestigious work or an authentic outpouring. When an objective style or a general assumption is combined with the artistic style, it may be exploited by the advertiser as a meta image".

A large portion of the students disagreed with the item indicating that appearance is more important than function, and this conflicted with their responses to the previous item. Students both indicated that they do not care about content when purchasing an item, and also reported believing that functionality is more important than appearance. These two items were placed consecutively in the attitude scale, and such conflicting responses indicate that students have not developed certain principles on this issue.

It is also worth mentioning Berger's statements about the role of advertising in production-consumption integrity:

"It is hoped that the audience-buyer should be jealous

about himself considering the state he will reach when he got the product. The target herein is to have the others jealous of that product. Such a jealousy will enrich his self-esteem." (Berger, 2008).

This may explain the student trends for these items. Considering the students' educational and demographic characteristics, their responses suggest that they have been educated in a profession that is not able to "make them happy" and that is "below their expectations", and in a profession that is not oriented toward the sensual life, nor toward the development of new attitudes, principles and actions.

A majority of the students disagreed with the item emphasizing the functionality of advertisement. In an environment where media surrounds human life, it is pleasing that students exhibited unconcerned attitudes about the product advertisements bombarded over the internet in an uncontrolled and "pirated" fashion. However, it should not be disregarded that the percentages of agreeing and undecided students were also remarkably high for this item. According to Haug (1997):

"As long as meta-aesthetics achieves "success" over the purchasers and at least determines their expenses, purchasers will find themselves in a state of Tantalus surrounded by the sweetest dreams of their needs. ... Tantalus is anaesthetized purchaser".

The undecided and agreeing responses in this sample implies that they are not concerned about being "anaesthetized purchasers".

"Meta-aesthetics shifts the improvement in human capabilities, satisfaction feelings, pleasures and happiness through dictating the way to be selected by an individual. Human motivation becomes tied to tendency to conformism" (Haug, 1997).

The statistical data can be visualized and interpreted as follows:

A majority of the students were aware of the misleading nature of packaging. However, of the senior students and teacher candidates, a substantial portion responded that the products they design and serve to markets with misleading packaging will not make them uncomfortable, because they will make money and become well-known. A majority of the students wish to be well-known designers or artists. Undecided students were also remarkably high for this item. Here, the economic obligations lie at the crux of the problem. However, ethics are also undoubtedly important in art. Ambition to make money, and to be publicized through advertising may be seen as the tactics of artists and designers to "remain standing" in global culture. These students are also teacher candidates. Therefore, they are expected to develop a principled attitude against lies.

A majority of the participant students were aware that it was possible to influence the desires of people through packaging and fashion and to impart elements of other cultures through media channels. Receiving higher education, raising culturally conscious youths, consciously producing and consuming, and being able to control media and to adapt them to one's own values and customs is the natural right of every individual. The present study and similar studies may help us to provide such an education, they will also let us to do comparisons and evaluations, and will also open new ways. This study will also be compared with the previous unpublished PhD thesis. It is hoped that this study will open new doors and working areas for youth in meta-aesthetics (Peşkersoy, 2009).

Higher educational art and design faculties providing sensitivity education should focus more on aesthetics, aesthetic values, art history and critical theory. Otherwise, instructors, artists, designers and even parents of the future will turn into ethically crippled generations, and they will place the exchange value of items over their other values.

These conclusions indicate the responsibility of higher educational institutes regarding the quality and practical characteristics of the education they provide, and ultimately, the responsibility of families in every case affecting students. Physical and technological equipment to provide practical training to students; beneficial instructor attitudes; and controlled, liberal, cooperative education and training methods will help to raise aesthetically conscious youths. The internal happiness and sensual satisfaction of instructors from their professions, their awareness of national values, and their methods of passing these values on to their students will improve student satisfaction with the instructors. The common interests of all these works are happiness, transformation, adaptation and motivation. This basic pattern may bring both students and instructors to achieve success, and components of this basic pattern will only be possible with conscious programming and sorting.

Conflict of interests

The author has not declared any conflict of interests.

REFERENCES

- Berger J (2008). Types of vision, trans. Yurdanur Salman, İstanbul: Metis Publishing, P 134.
- Cömert B (2007). Croce's esthetics (1st Issue), Ankara: De Ki Publishing.
- Davey N (2011). Gadamer's aesthetics (The Stanford Encyclopedia of Philosophy, [Winter 2011 Edition] 359 p.
- Haug WF (1997). Criticism of meta-aesthetics, trans. Ayşe Gül, İstanbul: Spartaküs Publications, [1st Issue] 14(43):60-61.
- Hegel GWF (1994). Aesthetics. Trans. Taylan Altuğ, Hakkı Hünler, İstanbul: Payel Publishing, [1st Issue] P 2.
- Marx K (2006). Capital Volume Three (Translated by: Alaattin Bilgi). (5th Issue), Ankara: Sol Publishing. (Original work was published in 1867-1883).
- Odenstedt A (2008). Gadamer on Bildung, The Southern Journal of Philosophy, 46:559-580 <http://onlinelibrary.wiley.com/doi/10.1111/j.2041-6962.2008.tb00085.x/abstract>
- Peşkersoy E (2009). Effects of demogtaphic characteristics and art education on student consciousness about meta esthetics (PhD diss., Gazi University, Institute of Educational Sciences).
- Sena C (1972). Aesthetics, İstanbul: Remzi Publishing [1st Issue] 202 p.
- Tataroğlu E (2015). Effects of art/design education on meta-aesthetics consciousness of fine arts students, Educational Research and Reviews, 10(7):912-932, doi:10.589/ERR2014
- TDK, Great Turkish Dictionary, Web: <http://www.tdk.gov.tr>
- Timuçin A (2005). Aesthetics, İstanbul: Mart Publishing, [7th Issue]. 86 p.
- Tunalı İ (1998). Aesthetic, İstanbul: Remzi Publishing, [5th Issue]. 13(14):17-18.
- Tunalı İ (2003). Marxist Aesthetic, İstanbul: Analiz Publishing, [3rd Issue] 65 p.

Full Length Research Paper

An investigation on the effectiveness of chess training on creativity and theory of mind development at early childhood

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In recent years, chess training is offered as a compulsory elective course in some pre-schools, whereas it is not offered in some other pre-schools. There are children who attend chess clubs outside of schools. Chess is considered to be a game of intelligence, and its effects on individuals have been the subject of many researches. This study was conducted to investigate whether chess training has any impacts on creativity and theory of mind skills of children. For this purpose, the study was conducted on a total of 87 children including 41 children who received chess training (67.9 months old) and 46 children who didn't receive any chess training (68.46 months old). As a result, the scores of children who had chess training were found to be higher than scores of other children both in creative thinking and theory of mind tests, and the difference between scores of these children were also found to be statistically significant.

Key words: Chess, preschool education, creative thinking, theory of mind.

INTRODUCTION

Chess is a board game for two players. Furthermore, it is a game of intelligence known all over the world with tournaments and championships. Some private schools offer chess courses beginning from preschool. It is offered as an elective course in some state schools. Some private chess clubs provide chess training courses and organize tournaments for children even in preschool. Since chess is a game of intelligence, and it helps developing strategic thinking and problem-solving skills of children, it may also be effective in improving their cognitive skills. Therefore, several studies were conducted to investigate the possible impacts of learning

and gaining experience in chess on individuals.

LITERATURE REVIEW

There are several studies conducted to improve student learning by investigating how strategies and skills used in strategic games can be transferred to other learning areas. In this way, researchers determined how these skills were transferred from a game into an academic field to see whether the expected learning goals have been achieved at a certain degree or even higher

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compared to other instructional strategies.

In a study conducted by Hays (2005), some games used for instruction at multiple levels such as elementary, middle high school and college were examined. According to the results of this study, although the use of games didn't help in improving the scores after instruction, though the same scores were given by other instructional strategies which mean that the advantages of using the games are comparable with the benefits of other strategies. Although the same skills were practiced in the games and other forms of instruction methods, students often preferred playing games. Thus, it can be concluded that learning skills in a game help students to transfer the skills to other areas (Adams, 2012).

Chess helps individuals to enrich problem solving abilities, improve intelligent thinking and enhance strategic thinking skills and even improving self-esteem as well as higher order thinking skills which is also known as meta-cognitive skills. Furthermore, young people evaluate their actions and predict future possibilities while playing chess. In countries, where chess is intensely played by students, practicing students become among the top students in math and science and they are able to recognize complicated patterns (Milat, 1997).

In *Creative Chess (Avni, 1998)*, which is a book written by Amazia Avni who is a psychologist and a chess master, the roots of creativity in human were analyzed. According to him, an intelligent process consists of four different steps as synthesis (opinion forming and plan shaping), gathering (collecting the raw materials during position evaluation), enlightenment (a sudden observation of an idea) and realization (translating the idea into practical lines of play). Thus, these four steps can be used for a creative process that could also work in some other areas (Bushinsky, 2009).

Theory of mind, divergent thinking and creativity

There are various transitions and understanding regarding the developing minds of children (Welman, 1995). The Theory of Mind (ToM), which was proposed by Permack and Woddruff in 1978 for the first time, provides a simple definition:

“The individual imputes mental states to himself and others” (Doherty, 2008).

ToM is correlated with social cognitive skills, and these skills have impacts on understanding beliefs and intentions as well as interpreting the mental state of other people (Li et al., 2013). Most researchers considered that there is a single transition in children's understanding of mental states which was a change they experience between 3 and 4 years of age or a change experienced from before to after an interpreting a false belief (Bartsch and Wellman, 1995).

The first level ToM skills of children is evaluated by appearance-reality, unexpected content and transfer processes. These first level skills start improving from the age of three. In these processes, children are asked to make predictions about their actions after being informed about beliefs and desires of the characters. The second level skills include the skills about multiple mental states and gained around the age of six. In the first level skills, in the task of unexpected content, objects that are very well-known by children are used. In this process, it is considered that realization of wrong beliefs help individuals to guess the beliefs of others (Gopnik and Astingto, 1988). In the process of unexpected-transfer, distinguishing opinions and referring to the state of mind of another person are evaluated (Flavell, 1999).

The development of ToM is a significant factor in the social domain and understanding the self as well as in the utilization of mental capacities of individuals through metarepresentation as it becomes real in the case of divergent thinking. In this way, new ways of using mind can find a change with the help of social intelligence. Transfer of knowledge between different fields and areas is an important factor for creativity and invention of humans (Suddendorf and Fletcher-Flinn, 1997). To refer mental capacities ToM of human, divergent thinking and creativity terms are often used in recent studies. Therefore, the relationship between these concepts should be examined.

Carnevale et al. (1990) describe divergent thinking as “a process for expanding the view of a problem. It involves thinking in different ways about the problem as a whole without necessarily trying to solve it. In divergent thinking, a person tries to connect ideas for which connections are not apparent; the resulting combinations may lead to a previously unsuspected solution to a problem” (Saccardi, 2014). It is easy to contrast divergent thinking with convergent thinking that basically results in correct and traditional ideas and solutions rather than unique options (Runco and Acar, 2012).

The definitions related to divergent thinking are beyond creativity. Creative or divergent thinker is described as the person who pushes the boundaries of ability and knowledge, and able to reconsider the problem to find a different perspective and solution and ignore distractions that can negatively affect his/her productivity (Saccardi, 2014).

Skills such as divergent thinking clearly depend on mental access to one's own mind improve with the acquisition of ToM. In addition, several researchers suggested that metarepresentation is an important factor in creativity. Children who are able to complete false-belief tasks are expected to be much better in divergent thinking tasks compared to other children since they are able to scan knowledge from diverse domains and areas in order to generate divergent and new answers for problems encountered (Suddendorf and Fletcher-Flinn, 1997).

Divergent thinking allows individuals to create testable hypotheses, and make reliable evaluation of creative thoughts. The important idea of evaluating creative thoughts is exploring the potential. Since divergent thinking leads to originality and originality is the key idea of creativity, divergent thinking is not the same as creative thinking. However, although someone may not perform very well in creativity, he/she can do well on a test of divergent thinking (Runco and Acar, 2012).

Creativity can be defined in two ways as the process of rediscovering something which has already been discovered and producing something new (Deroche, 1968). Today, there is a common ground about creativity which implies that "bringing something into being that is original (new, unusual, novel, unexpected) and also valuable (useful, good, adaptive, appropriate)" (Osche 1990). Although creative thinking is a new concept that is discussed in human evaluation, its cognitive basis has a long and evolutionary history. Three foundations of creative thinking largely evolved on an independent basis as a capacity for language, a theory of mind and a complex material culture (Gabora, 2013).

Mithen (1998) suggests that there are cognitive prerequisites required for human creativity as a complex material culture, a theory of mind (ToM) and language that are leading to an improved mind. These cognitive skills can be combined in order to allow emergence of cognitive fluidity that facilitate the production of creative thinking. In this process, the mind brings different concepts together from social, natural history and technical domains (Keenoo, 2014).

In creativity studies, researchers have used some tests. Hocevar (1981) proposed four types of creativity tests as biographical inventories, attitude and interest inventories, divergent thinking tests and personality inventories. Although each test provides useful information, the divergent thinking tests are commonly used in the area of creativity assessment for several decades (Runco and Acar, 2012).

In the literature, the effectiveness of chess were investigated on some topics such as problem solving involving geometric and numeric patterns (Ferreira and Palhares, 2008), reading scores (Margulies, 1991), intelligence (Bilalic et al., 2007; De Bruin et al., 2014), problem solving skills (Erhan et al., 2009), scholastic achievement (Thompson, 2003), intellectual and social-emotional enrichment (Aciego et al., 2012), meta-cognitive ability (Kazemi et al., 2012), spatial concepts (Dikici-Sigirtmac, 2012) and mathematics (Barrett and Fish, 2011; Romano, 2011; Aydın, 2015). Some findings of these researches suggest that chess help improve these skills while some studies conclude that there is a complex relationship between chess and improvement of other skills. The study group consists of individuals at least seven years old in general.

However, the relationship between children's creativity, ToM development and chess training should be investigated on six-year-old children especially, since it is

considered to be important for children in their early childhood years. The aim of this study was to investigate whether chess training is effective in the development of creativity and ToM of six-year-old children. The following research questions were tried to be answered:

1. Is there a significant difference between the Torrance Tests of Creative Thinking (TTCT) scores of children who received chess training and who didn't receive chess training?
2. Is there a significant difference between the ToM Test scores of children who received chess training and who didn't receive chess training?
3. Is there a significant relationship between the TTCT scores and ToM Test scores of children who received chess training and who didn't receive chess training?

METHODOLOGY

This study was conducted within the scope of relational screening model that allows us to make screening in the types of comparison and correlation. This model aims to provide information about the presence or degree of change between two or more variables (Karasar, 2012).

Participants

The study was conducted on a total of 87 children including 41 children (Mean=67.9 months and 22 female-19 male) who received chess training, and 46 children (Mean= 68.46 months and 19 female- 27 male) who didn't receive any chess training, respectively. Children received chess training for two hours at each week. The training that was conducted by chess teacher lasted for at least seven months at the early childhood education institution. Gazi Early Childhood Development Assessment Tool (GECDAT) was applied on children to determine whether they had experienced any problems in their development. Children with developmental problems were excluded.

The difference between GECDAT scores of children, who didn't experience any development problems, with and without chess training was analyzed by t-test, and no significant difference was found ($t(85)=1.11$, $p>.05$). According to this result, it can be suggested that the development of all children included in the study meets the expectations according to their age.

Materials

ToM tests (False Belief Task and Appearance-Reality Task), Figural Form A of the Torrance Tests of Creative Thinking (TTCT) and GECDAT were employed as the data collection tools.

Gazi early childhood development assessment tool (GECDAT)

Development of children follows a particular sequence while advancing specific to each child. Therefore, assessing developmental status of participant children was needed. GECDAT is a development evaluation tool that can be used to evaluate the development of Turkish children within the range of 0 to 72 months old, and to regulate their educational experiences and for early diagnosis of developmental retardations.

GECDAT consists of four subtests including psychomotor (73 items), cognitive (60 items), language (60 items) and social

development (56 items), and a total of 249 items. Items related to self-care skills are in the social-emotional development subtest. Since there are differences between development levels of children according to their age, the numbers of items vary depending on their age and development areas. This tool can be used to determine development characteristics of children, whether they need specific requirements, detect differences between development levels of them, and provide more detailed diagnostic methods. GECDAT can be used with a standard set of materials and user manual. These materials are used to create a game environment for children, and they are evaluated in this environment. The normative study of the instrument was conducted with 4242 children. The split-half reliability ($r = .99$) were calculated with the data from 1890 children. While the interrater reliabilities of the age groups varied from 0.88 to 0.99, correlations of the subscale scores with the overall development score were found in the range from 0.81 to 0.98. (Temel et al., 2005). "User Certificate" is required to use the tool.

Torrance tests of creative thinking figural form A (TTCT)

TTCT Figural Form A, which was developed by Torrance in 1966 and adapted to Turkish and validated by Aslan (2001), was used. Figural Form A consists of three subtests as image creation, image completion and parallel lines. Norm based measures of creativity are evaluated within the sub dimensions of fluency, elaboration, originality, abstractness of titles and resistance to premature closure. Criterion based measures are discussed within 12 dimensions. Scores of these three tests are evaluated within the dimensions of emotional expressions, storytelling, movement or activity, exposition of the titles, combining incomplete figures, synthesis of incomplete lines, unusual visualization, internal visualization, extending or exceeding the limits, humor, richness or colorfulness of imagination and fantasy. The total creative score is obtained by adding the score gathered from criterion based measures on norm based measures.

Aslan (2001) has also conducted studies about its translation, adaptation of test items into Turkish, validity and reliability of its adaptation to Turkish. The correlation total figural creativity between English and Turkish test applications was found to be highly significant ($r = 0.59$). The internal consistency values were between $r = 0.38$ and $r = 0.89$. The lowest Cronbach's alpha value was found as 0.5 for preschool group while the highest internal consistency was determined as 0.71, respectively. The internal and external validity studies were conducted within the scope of validity studies. Title list, Wechsler Adults Form and Wonderlic Personnel Test (General Aptitude Test) was used for criterion validity, and as a result of the analyses conducted, the test was found to be reliable for all age groups and score types (Aslan, 2001).

ToM tests

"Unexpected content task" (Gopnik and Astington, 1988) and "unexpected-transfer task" tests were applied for ToM (Flavell, 1999). Gum box and stones were used for unexpected content task, while Caillou, Pepe (cartoon character) figures and tennis ball was used for unexpected-transfer task. The lowest score that can be received from tests was 0, whereas the highest score was 4.

Design and procedure

First, the schools offering chess training were identified. Then, schools that are not offering any chess training were identified. The necessary permissions were obtained from both schools and parents. GECDAT, TTCT, and ToM Tests were respectively

administered on children. Children with development problems were excluded after administration of GECDAT test. Before these tests, children were informed about the study, and volunteers were included in the study group. No child has refused to participate in the study. All applications were performed in a separate room with each child. Suitable tables and chairs were provided for children. It took about 20 min to finish GECDAT, whereas 30 min for TTCT and 10 min for the ToM tests, respectively. All instructions at the tests were given by researchers due to the fact that the children are illiterate. The data were collected in April-May.

Data analysis

Children's GECDAT scores were calculated, and t-test was used to test whether there is a significant difference between scores of these two groups. Kolmogorov-Smirnov Test was used to determine whether TTCT and the ToM scores were normally distributed in all study groups. According to this test, TTCT scores were normally distributed, whereas ToM scores were not normally distributed.

Independent samples t-test was used to determine whether there is a significant difference between TTCT scores of those who received chess training, and those who didn't receive any chess training. On the other hand, Mann Whitney U Test was used to determine whether there is a significant difference between the ToM scores. Spearman correlation analysis was performed to see whether there is a significant correlation between TTCT and ToM scores of children who received chess training, and other children who didn't receive any chess training.

FINDINGS

The findings of this study, which was conducted to see whether there is a significant correlation between creative thinking and ToM scores of children who received chess training and other children who didn't receive any chess training, are listed below in the order, and in accordance with sub-goals. T-test was used to determine whether there is a significant difference between TTCT scores of those who received chess training, and those who didn't receive any chess training. The findings are given in Table 1.

Considering the findings in Table 1, there are statistically significant differences between Resistance to Premature Closure ($t(85)=2.36$, $p<.05$) and Elaboration ($t(85)=4.42$, $p<.01$) scores of the groups in the subscales of TTCT. In addition, there are statistically significant differences between total creativity ($t(85)=4.00$, $p<.01$) scores of children who received chess training and other children who didn't receive any chess training. The children who received chess training obtained the highest average scores from Elaboration and Fluency, whereas the lowest average scores were obtained from Abstractness of Title. On the other hand, children who didn't receive any chess training obtained the highest average score from Fluency, and they obtained the lowest score from Abstractness of Title, respectively.

Mann Whitney U Test was used to determine whether there is a significant difference between the ToM scores of children who received chess training and other children who didn't receive any chess training, and the results are

Table 1. Result of independent samples T-Test between chess player and non-chess player.

Variable		n	M	S	sd	T	P
Fluency	Chess player	41	29.95	8.44	85	1.65	0.103
	Non-chess player	46	26.94	8.58			
Elaboration	Chess player	41	33.49	20.68	85	4.42	0.000**
	Non-chess player	46	18.52	9.44			
Originality	Chess player	41	15.27	4.02	85	1.63	0.108
	Non-chess player	46	13.85	4.11			
Abstractness of title	Chess player	41	2.34	2.31	85	1.39	0.169
	Non-chess player	46	1.72	1.88			
Resistance to premature closure	Chess player	41	10.02	4.25	85	2.36	0.020*
	Non-chess player	46	7.94	4.00			
Total	Chess player	41	91.83	30.03	85	4.00	0.000**
	Non-chess player	46	69.89	20.78			

*The mean difference is significant at the 0.05 level; ** The mean difference is significant at the 0.01 level.

Table 2. Results of Mann Whitney U-Test of ToM tests scores between chess player and non-chess player.

Group	n	Mean of rank	Sum of rank	U	P
Chess player	41	48.67	1995.50	751.50	0.048*
Non-chess player	46	39.84	1832.50		

*The mean difference is significant at the 0.05 level.

given in Table 2. Considering the findings illustrated in Table 2, according to Mann Whitney U-test, there is a significant difference between ToM skills of children who received chess training and other children who didn't receive any chess training ($U=751.50$, $p<.05$). Considering the mean ranks, ToM abilities of those who received chess training were found to be higher than abilities of those who didn't receive any chess training. Spearman correlation analysis was performed to see whether there is a significant correlation between TTCT and ToM scores of children who received chess training and other children who didn't receive any chess training, and the findings are given in Table 3.

According to Table 3, there is a positive and significant relationship between children who received chess training in terms of ToM scores and average scores of "fluency" ($r=0.475$, $p<.05$), "originality" ($r=0.486$, $p<.05$), "resistance to premature closure" ($r=0.377$, $p<.05$) subscales of TTCT and Total TTCT ($r=0.414$, $p<.05$). The relationship between the ToM Scores, subscale and total scores of TTCT of children who didn't receive any chess training was not found to be significant ($p>.05$).

In addition, a positive and significant relationship was found between ToM scores and average scores of "fluency" ($r=0.307$, $p<.05$), "originality" ($r=0.282$, $p<.05$), "abstractness of title" ($r=0.280$, $p<.05$) subscales of TTCT and total TTCT ($r=0.303$, $p<.05$) of all children included in the study. In conclusion, a positive and significant moderate uphill (positive) relationship was found between TOM and TORRANCE total scores of children who received chess training ($r=.414$, $p<.01$), and there is no significant relationship found between total scores of children who didn't received any chess training ($r=.041$, $p>.05$).

DISCUSSION

In this section, the findings related to creative thinking and the ToM skills of children in both groups were discussed. The generalizations obtained from this study are limited by the sample size of the study. Discussions should be evaluated within these limitations.

In this study, a statistically significant difference was

Table 3. Correlation between TTCT scores and ToM test scores of chess player and non-chess players.

Group	TTCT						
	Fluency	Elaboration	Originality	Abstractness of title	Resistance to premature closure	Total	
Chess player	r	0.475	0.260	0.486	0.204	0.377	0.414
	p	0.002**	0.100	0.001**	0.200	0.015*	0.007**
	n	41	41	41	41	41	41
ToM tests Non-chess player	r	0.099	-0.069	0.121	0.288	-0.052	0.041
	p	0.512	0.650	0.425	0.052	0.733	0.785
	n	46	46	46	46	46	46
Total	r	0.307	0.172	0.282	0.280	0.182	0.303
	p	0.004**	0.112	0.008**	0.009**	0.092	0.004**
	n	87	87	87	87	87	87

*The mean difference is significant at the 0.05 level; ** The mean difference is significant at the 0.01 level.

found between elaboration, resistance to premature closure and total TTCT scores of children in favor of those who received chess training. Creative thinking is a skill that can be found in all individuals, and it can be improved. Children face problems constantly while playing chess. They have to be creative while seeking solutions and planning to reach the target. Children playing chess can find a chance to improve their creative thinking skills by either themselves or instructions of their teachers. As a result of the study, considering both groups, abstractness of title has the lowest average score among creative thinking skills. The highest average score of children who received chess training was obtained from Elaboration and fluency, whereas the highest average score of children who didn't receive any chess training was obtained from fluency.

This result is consistent with findings of Aslan (2001), who adapted TTCT into Turkish, and conducted validity and reliability studies of the scale. The lowest score found in abstractness of titles may be due to the underdeveloped abstract thinking skills of preschool students. Students seem to be weak in finding deeper meanings for the activities, and attribute abstract meanings compared to their creative skills. It is noteworthy that unlike Aslan's (2001) results, Elaboration scores of children who received chess training have the highest average. This finding suggests that children who received chess training pay more attention to details. In chess, it is important to not to overlook the details and consider different perspectives.

In this study, a statistically significant difference was found between the ToM skills of children who received and didn't receive any chess training. This suggests that chess training may have positive impacts on the development of the ToM skills of children. ToM is closely associated with cognitive development. The results of this study are consistent with the results of the experimental

study conducted with children aged 6 to 16 years by Aciego et al., 2012. They have concluded that cognitive skills and social-emotional development scores of experimental group playing chess were higher than scores of the control group playing either soccer or basketball in children and adolescents, and the difference was found to be statistically significant.

Most of the studies conducted in the last 20 years evaluate the aspects of cognitive development of children such as ToM and Metacognition (higher order thinking skills). It can be said that there is a direct correlation between ToM and Metacognition. The ToM enables individuals to realize that other people may have different perspectives, understand mental states such as faith, beliefs, desires and knowledge of him/her or others, and have the ability of representing these states mentally. In short, cognitive skill allows individuals to reflect theirs or others' contents of the minds (Goldman, 2012). The child playing chess needs to guess the intention of his/her competitor in each move and think about the possible moves against the move of other player, and also shape his/her next move accordingly. In chess, players should protect themselves in each move, and proceed as planned to win the game. Children may have the opportunity to develop higher-order thinking skills such as ToM while playing chess.

Kazemi et al. (2012) conducted a study with students at various grades to investigate the impact of playing chess on the development of mathematical problem-solving capability and meta-cognitive ability of these students. According to the results of their study, students playing chess have shown better achievement in both mathematical problem solving capabilities and meta-cognitive abilities compared to other students who don't play chess. Furthermore, there was a positive and significant relationship between mathematical problem solving capabilities and meta-cognitive abilities of

students. Therefore, it can be concluded that chess can be used as an effective tool in order to develop the higher order thinking skills of children.

A positive and significant relationship was found between the ToM scores and total average scores of children playing chess obtained from “fluency”, “originality” and “resistance to premature closure” subscales of TTCT and Total TTCT. The relationship between the ToM scores and subscale, and total scores of TTCT of children who didn’t receive any chess training was not found to be significant ($p>0.05$). In addition, a positive and significant relationship was found between ToM scores and average scores of “fluency”, “originality” and “abstractness of title” subscales of TTCT and total TTCT of all children included in the study.

As a result of the study, it can be suggest that both ToM development and creativity of children playing chess is higher than ToM development and creativity of children who don’t play chess. Other studies show that there is a positive relationship between ToM and creativity development of children. Accordingly, Suddendorf and Fletcher-Flinn (1997) have conducted a study entitled “ToM and the Origin of Divergent Thinking” with children aged 3 to 4 years in order to analyze the relationship between creativity and ToM development of these children, and to determine whether children having ToM are better at searching their own minds to find creative answers. In their study, the numbers of appropriate and original answers given in the creativity test were found to be positively correlating with performance on incorrect-belief tasks.

The aim of Sığirtmac’s (2012) study was to investigate whether chess training would have any impacts on the development of spatial concepts such as between–next to, in front–behind, far–near, corner, diagonal, forward–backward, pattern and symmetry of six-year-old children, and to determine whether there are differences depending on gender of these children. According to the results of Mann Whitney U test, there was a statistically significant difference in all concepts in favor of the children who received chess training. However, there were no differences between these children in any concept depending on their gender. As it can be seen in this study, learning and playing process of chess supports the learning skills of children in other areas.

The results of this study may be an indication suggesting that playing chess may have positive impacts on the development of creative thinking and ToM skills of children.

CONCLUSION AND SUGGESTIONS

As a result; children in the sample group didn’t have any differences in terms of cognitive, language, social-emotional and psychomotor development, whereas creative thinking and ToM skills of children playing chess were found to be significantly different from other

children. Chess is considered to be supporting these skills in children. Therefore, offering chess training as a course in all schools for all age groups may support the development of children in many areas. Especially children who are interested in chess may attend to chess clubs. If a similar study is conducted with pretest and posttest model, detailed information about impact of playing chess on the ToM and creative thinking performances of children who are playing and not playing chess may be achieved. Working with larger sample groups may be useful to generalize the information obtained.

Conflict of interests

The author has not declared any conflict of interests.

REFERENCES

- Aciego R, Garcia L, Betancort M (2012). The benefits of chess for he intellectual and social-emotional enrichment in school children. *Spanish J. Psychol.* 15(2):551-559.
- Adams TCP (2012). Chess from Square a1: Incorporating chess into the gifted class. *Gifted Child Today*, 35(4):242-251.
- Aslan E (2001). Torrance Yaratıcı Düşünme Testi’nin Türkçe versiyonu. *M.Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 14:19-40.
- Aydın M (2015). Examining the impact of chess instruction for the visual impairment on mathematics. *Educ. Res. Rev.* 10(7):907-911.
- Barrett DC, Fish WW (2011). Our move: Using chess to improve math achievement for students who receive special education services. *Int. J. Special Educ.* 26(3):181-193.
- Bartsch K, Wellman HM (1995) Children talk about the mind. New York: Oxford University Press.
- Bilalic M, McLeod P, Gobet F (2007). Does chess need intelligence? - A study with young chess players. *Intelligence.* 35:457-470.
- Bushinsky S (2009). Deus Ex Machina-A higher creative species in the game of chess. *AI Magazine.* 30(3):63-70. <http://dx.doi.org/10.1609/aimag.v30i3.2255>
- De Bruin ABH, Kok EM, Leppink J, Camp G (2014). Practice, intelligence, and enjoyment in novice chess players: A prospective study at the earliest stage of a chess career. *Intelligence.* 45:18-25.
- Deroche EF (1968). Creativity in the Classroom. *J. Creative Behav.* 2:4.
- Dikici Sığirtmac A (2012). Does chess training affect conceptual development of 6-year-old children? *Early Child Development and Care,* 182(6):797-806. <http://dx.doi.org/10.1080/03004430.2011.582951>
- Doherty MJ (2008). Theory of mind: How children understand others’ thoughts and feelings. Psychology Press, New York.
- Erhan E, Hazar M, Tekin M (2009). Satranç oynayan ve oynamayan ilköğretim öğrencilerinin problem çözme becerilerinin incelenmesi. *Atatürk J. Phys. Educ. Sport Sci.* 11(2):1-8.
- Ferreira D, Palhares P (2008). Chess and problem solving involving patterns. *Montana Math. Enthusiast,* 5(2&3):249-256.
- Flavell JH (1999). Cognitive development: Children’s knowledge about the mind. *Annual Rev. Psychol.* 50:21-45.
- Gabora L (2013). Contextual Focus: A Cognitive Explanation for the Cultural Revolution of the Middle/Upper Paleolithic. <http://arxiv.org/ftp/arxiv/papers/1309/1309.2609.pdf>
- Goldman AI (2012). *Oxford Handbook of Philosophy and Cognitive Science* (Edited by Eric Margolis, Richard Samuels, and Stephen Stich), http://diabeto.enseiht.fr/download/perception/Goldman_2012.pdf
- Gopnik A, Astington JW (1988). Children’s understanding of representational change and its relation to the understanding of false belief and the appearance-reality distinction, *Child Dev.* 59:26-37.

- Hays RT (2005). The effectiveness of instructional games: Literature review and discussion, (Technical Report No. 2005-004). Retrieved on December, 2014, from file:///C:/Users/pc/Downloads/ADA441935.pdf
- Karasar N (2012). Bilimsel Araştırma Yöntemleri, Ankara: Nobel Yayıncılık.
- Kazemi F, Yektayar M, Abad AMB (2012). Investigation the impact of chess play on developing meta-cognitive ability and math problem-solving power of students at different levels of education. *Procedia-Soc. Behav. Sci.* 32:372-379.
- Keenoo H (2014). The evolution of creativity. *Imaginative Minds: An Interdisciplinary Symposium*. <http://www.britac.ac.uk/events/imagination/resources/keenoo.htm>
- Li X, Wang K, Wang F, Tao Q, Xie Y, Cheng Q (2013). Aging of theory of mind: The influence of educational level and cognitive processing. *Int. J. Psychol.* 48(4):715-727.
- Margulies S (1991). The effect of chess on reading scores: District nine chess program second year report. Unpublished manuscript, American Chess Foundation, New York.
- Milat M (1997). The role of chess in modern education. Retrieved on December, 2014, from <http://southernchessclub.org/site/documents/TheRoleofChessinModernEducation.pdf>.
- Osche R (1990). *Before The Gates Of Excellence: The Determinants Of Creative Genius*. Cambridge, UK: Cambridge University Press.
- Romano B (2011). Does playing chess improve math learning? Promising (and inexpensive) results from Italy. Unpublished doctoral dissertation, University of Pennsylvania.
- Runco MA, Acar S (2012). Divergent thinking as an indicator of creative potential. *Creativity Res. J.* 24(1):66-75.
- Saccardi MC (2014). *Creativity and children's literature : new ways to encourage divergent thinking*. Cambridge: University Press.
- Suddendorf T, Fletcher-Flinn CM (1997). Theory of mind and the origins of divergent thinking. *J. Creative Behav.* 31:59-69.
- Temel F, Ersoy Ö, Avcı N, Turla A (2005). Gazi Erken Çocukluk Gelişimi Değerlendirme Aracı "GEÇDA". Ankara: Rekmay Ltd. Şti.
- Thompson M (2003). Does the playing of chess lead to improved scholastic achievement? *Issues in Educ. Res.* 13(2):13-26.
- Wellman HM (1995). *The child's theory of mind*. Cambridge, MA: MIT Press.

Full Length Research Paper

Reasons for avoidance of vocational education in Jordan

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The study aimed to identify the factors that lead students to avoid joining Vocational Education (VE) in Jordan. A pilot study was conducted, then a 39-item questionnaire was developed, and its validity and reliability were ensured. The reasons included were divided into personal, social, economic, educational and vocational domains. The questionnaire was administered to 1050 students of the 10th basic grade. Results showed that the factors included in the questionnaire contribute at a medium level to students' avoidance of VE. The highest contributing factors were the vocational factors of which the most contributing factor was the nature of the jobs that they had to take up. The second was the domain of personal factors, the highest of which was the discrepancy between students' academic ambitions and the nature of vocational work. The third was the social factors, the highest of which was the effect of peers and their academic orientations. The fourth in level were the economic factors with the fluctuating nature of the income for the prospective careers of those who join VE being of the highest influence. The least contributing domain was the educational domain with the negative image of vocational schools being of the highest influence. The study produced some recommendations to mitigate avoidance of VE.

Key words: Avoidance of vocational education, vocational education, career choice.

INTRODUCTION

Thinking of selecting the educational stream is a vital issue for students especially at the end of the basic education stage that represents the medium that delivers the education inputs in its two academic and vocational branches representing its main outputs. Choosing the vocational stream is a very particular process for the individual since it contributes in his/her career success, which is in return reflected in his/her accommodation and stability. The student's choice of his/her study stream

leads to his/her choice of future's career, thus it is considered one of the most important decisions in one's life since it almost determines his life style, social status, and occupational ladder. It also has its own dimensions and effects on all of their life.

The world labour market is exposed to rapid changes as a result of the successive technical, economic, and political and developmental changes which influences the career choice because of the increase in the scientific,

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vocational and practical specializations. Careers have become multiple and wide in their fields, and each career began to have its own study specializations and characteristics. Our age is considered a changeable age where the world's lives up to renewed industrial and technological revolutions. Future also holds a lot in the world of career, which means that there would be several careers that are different from those available today with new requirements that force individuals to change their careers several times during their practical life (Jeynes, 2007; Al-Masri, 2003; MacAskill, 2014).

Because there is a close relationship between education programmes of all their branches and the kind of job, a student can be involved in the future. Therefore, education should provide them with a model of occupational choice, which requires that students and parents should be aware of the labour market and the available occupational opportunities, in addition to providing the right information that may help them in selecting the future educational stream correctly (Liu et al., 2014).

The relationship between the general education and transition to the workplace has been raising a big debate through the last decades. The 'Vocationalisation Debate' is a controversy that has developed internationally since the 1960s, mainly concerning the provision of vocational education at secondary school level. Different issues are related to this debate. These include cultural issues relating to the status of vocational education as seen by the students, the teachers and the wider community including the students' parents. Other issues are economic, regarding the cost of the programs in comparison with that of academic education; and some functional issues concerning purely vocational schooling versus purely academic schooling or the provision of diversified curriculum (Hayward, 2004).

Increasing evidence has come to the conclusion that vocationalising the school curriculum is not viable (Grubb, 2004). Since the mid-1970s, aid agencies such as the World Bank started showing significant shifts in their sponsorship from vocational to non-formal education and other programs (Hayward and James, 2004). Most of the evidence castigating the inclusion of vocational courses as part of school curriculum seems to be based on economic arguments. It was found that vocational courses are expensive. Significant contributions to the debate have concluded that policies emphasising the provision of vocational education in schools are doomed to failure. They contend that schools should concentrate on increasing access to and improving the quality of general education. However, the suggestion to delay providing vocational education until after secondary education implies denying the majority of pupils the opportunity to acquire even basic vocational skills (Hayward, 2004). Although the bulk of literature provides evidence counter to a policy of vocationalising the school

curriculum, protagonists have provided counter-evidence in support of its provision. Although acknowledging that vocational subjects were substantially more expensive than academic.

Thus, the duty of preparing the individual through providing an educational strategy that links between the school and the work lies on the educational system. This is called "Education for Career" which focuses on providing students with the necessary attitude and skills to accommodate with the various changes. This includes: Academic basic skills, the skills of decision-making and job-seeking, getting a job and keeping it, good work habits, and a system of positive personal values towards the job (Galliot et al., 2015; Twarawneh, 2000). There are various reasons which influence the individual's vocational choices such as:

The occupational ladder at the labour market

Individuals usually begin with an occupation from which he/she is promoted up an accelerated ladder most of the time where responsibility and salaries increase and the work conditions get better. This is called the occupational ladder. Promotion from one position or level to another within the occupational ladder requires a period of time that may be short or long according to the occupation, and according to the orientations, motivations and opportunities available to that individual. Sometimes, that individual may move one or more steps backwards because of the difficult requirements of the new job. That same individual may jump over trespassing some jobs speeding up his progress up that ladder because of his distinguished activity or any other circumstances (Liao and Ji, 2015). At the labour market, experience and seniority plays a conspicuous role in promotion, in addition to the job and production conditions at the factory. Whenever production increases, this leads to an increase in the demand for higher level occupations at the occupational ladder, especially from those who worked in the factory.

Therefore, the obviousness of the occupational ladder and the kinds of the available careers at each level, the requirements of entering such jobs and the reasons that help to be promoted in them are necessary to be aware of because they influence the individuals' occupational decisions (Amir and Gati, 2006; Atwan, 2001). If curricula worked all through the study years on making individuals' vocational decisions more positive and more compatible with their status quo and with their interests and abilities, they would have achieved one of the most important objectives of learning in life (Mahasneh, 2011).

Income and social class

Parents are keen to teach their children, but the social

classes under the poverty line mostly find it so difficult to pay for education costs. Therefore, they refuse to making their sons involve in the labour market at an early age. This deprives them from progressing in education. Thus, the poorest individuals and those with low level of education are at the lower levels of the vocational ladder where the work conditions are not attractive (Wilson, 2011; Rossetti, 1990). This leads to an increase in the percentage of those who quit the labour market to join the unemployed individuals. As a whole, the opposite may take place (even among the poor). Some poor people let their sons continue their education with the aim of moving them away from the unattractive work conditions which they themselves might have experienced, and so they try to help their children approach the university education (Watkins and Noble, 2008; Wilson, 2011). When they are graduated, they are surprised to discover that they can't find any job opportunity (Israel et al., 2001). Thus, such parents had unintentionally harmed their children and themselves, because of the lack of comprehensive awareness of the job conditions and their dynamic change.

Gender differences

Females are inclined to take up office jobs more than their inclination towards manual work (Walker, 2005). They accept less wages than males. There are some jobs which are excluded to females such as cosmetics careers, nursery, kindergarten and secretary careers. There are also some jobs which are excluded to males such as the industrial jobs of production, maintenance, transportation, storing and others. In the Islamic communities along with conservative communities in general, this custom is available reflecting commitment to the religion teachings, customs and habits, (Cheung and Dimple, 2012; Al-Saaideh and Al-Zyouud, 2009; Sikora and Saha, 2009). There is nothing to prevent its being available. The researcher doesn't see any use in seeking to answer the strangers calls to open up all work fields for both sexes since it contradicts with the social role practised by both males and females in the society. It also contradicts with our religion, habits and customs. In general, studies showed that students themselves, at the upper basic stage and at the secondary stage in Jordan, expressed their desire to get trained on jobs that are fit for their social roles (Al-Saaideh, 2011).

Influence of family and friends

Many believe that entering a chosen job depends mainly on family and peers' support. Since family and peers belong almost to the same social class, and since the social class is closely related to the vocational field, the

availability of information about these careers and job opportunities is limited to such careers. These job opportunities lie within the knowledge of the family and peers (Israel et al., 2001). Nevertheless, the more the curriculum works on providing information for all, and works on increasing awareness, the less influential this factor will be (Watkins and Noble, 2008).

Vocational counselling and occupational status careers

These are classified into high level if their educational requirements are high, and if the income is also high, and low level if they require manual work (Israel et al., 2001). Counsellors are inclined to encourage students to choose a career preferred by their parents (Tomlinson, 2012). If counsellors commended that some careers are better than others, they would reduce the chances of the students' choice. Therefore, adequate information must be provided about the various careers and work conditions in a neutral way. School advisors must foster work values (Liu et al., 2014). In general, the more vocational guidance and counselling work on making the individual join a career that fits his/her needs, interests and the labour market are provided to students, the more a student will be safe of committing a mistake in making his/her vocational decision (Sikora and Saha, 2011).

Abilities

Individual abilities vary greatly. To increase individuals' options of careers, such abilities should be developed as much as possible (Unterhalter, 2003). The problem lies in discovering such abilities. If such abilities remain potential, the students' options will be less than that even if there were vocational programs at the schools where they study (New South Wales Education and Communities, 2014; Walker, 2005).

Thus, the curriculum activities, whether in the Vocational Education (VE) course or others must help learners in discovering their mental and physical abilities to work on developing and directing them towards work and achievement, in addition to providing accumulative records to help them and the teachers in knowing such abilities to build on them so that they mature by the time the students had reached the end of the student's school age (Keating et al., 2012). Thus, they would be ready to choose the future specialization or to take up a career that is suitable for them. Individuals' joining the aptitudes they practised at school such as the players, artists, computer specialists and others is a living evidence of that. Any way, we rarely see that the educational establishments respond to such interest to open up wider horizons of various vocational options for individuals. No

matter how wide the vocational options and opportunities opened in front of individuals who don't realize their interests, they would be very narrow (Lent et al., 2000; Tarawneh, 2000; Atwan, 2001).

VE has not greatly developed in the Arab World. On the contrary, it improved slowly because of the educational policy connected with general political trends, as a result of transferring the educational policy at the developed countries without taking into consideration the conditions of such countries (aAbdel- Raheem et al., 2010). Separation between the general academic education and VE, in addition to looking down on manual work, and the extreme weakness of the job establishments constitute the main reasons for the weakness of the VE in the Arab World (Al-Adwan, 2009). With the increase of the development movement, it became vital to care for human cadres to qualify them to administer the establishments and projects of the vocational work. Thus, reconsideration of the educational policies is a must to find a new vision to promote this purpose (Mahasneh, 2011; Tweissi, 2013).

Countries issued legislations related to VE in order to include it in the curriculum from a very young age to draw students' attention, and to help them know their interests and abilities. In this way, VE became a part of the General Education after its low status in the educational process (Galliot et al., 2015).

In spite of the official care of VE, the Jordanian society still looks down on it when compared with the academic education which is highly valued and respected. Mrayyan (2010) points out that "despite the comprehensive scientific change witnessed by our society, the look towards the VE is still negative. Since the general opinion of VE is still unattractive to students and parents, there is an urgent need to implement solutions that may contribute in improving this opinion. This was asserted in the seventh priority of the "Sector of Employment, Training, and VE in Jordan"; which states that:

"It is necessary to enhance the image of careers of VE and Training programs through enhancing awareness of the importance of these sectors" (NET, 2011; Ministry of Labor, 2011).

With the emergence of the economic development plans in Jordan during the 1990s, the programs and streams of Secondary General educational and technical education became plentiful with the inclusion of new specializations that fit with the technological advances and labour market requirements. The most important update in the school curricula is adopting the approach of having one curriculum with complementary teaching and training units or qualifying modules based on competency. Such modules are adopted in the applied secondary education. They include theoretical and technical information in addition to practical training to achieve a group of training

competencies that fit for the vocational level required at the labour market (ALECSO, 1998; Alsaydeh, 2002). The Ministry of Education worked on the extension of the VE through two main programs for vocational secondary education:

1. Comprehensive Secondary VE which is a two-year program after passing the 10th basic grade. At the end of it, students sit for the exam of the General Certificate of Secondary Examination (GCSE). This certificate allows students to work or to join higher education at universities and technical colleges in their specializations.
2. Secondary Applied VE which is also a two-year program after passing the 10th basic grade, but this program does not qualify students for the exam of the GCSE. Instead, they obtain a school certificate from where they were trained. Nevertheless, they can sit for the GCSE Examination one year after completion of the training program (Al-Adwan, 2009; Yusuf, 2012).

There are various bodies that care about VE in Jordan such as:

1. Schools from the 1st basic grade up to the 10th basic grade (the basic stage) who teach the Pre-VE subject (PVE). It consists of different domains; (health and general safety, general life and domestics, Engineering industries and light maintenance, agriculture and environment, economy and technology, tourism and hospitality) (Al-saaideh, 2013).
2. Vocational schools for the 1st and 2nd secondary vocational grades. This is called VE (Secondary stage). The program is provided in four domains (industrial, agricultural, hospitality, and home economics). Students are graduated as skilled workers according to the occupational ladder in Jordan (Yusuf, 2012).
3. The Vocational Training Centers that turn out skilled, workers with limited skills, and technicians according to courses with various durations (Al-Mahasneh and Al-Saaideh, 2015).
4. Community colleges (Technical Education) that graduate technicians of diploma degree in various vocational specializations (Al-Mahasneh and Al-Saaideh, 2015).
5. Other parties in the Private Sector such as the Electricity Company, the Communication Companies and the Royal Forces turn out technicians for their employment to satisfy their needs of vocational specializations (Al-Mahasneh and Al-Saaideh, 2015). Figure 1 shows the relationship between the educational levels and the occupational levels in the Jordanian VE provision.

According to UNESCO- UNEVOC (2012), al-Raggad (2005) and the European Training Foundation (2006) there are different aspect to the VE promotion in Jordan

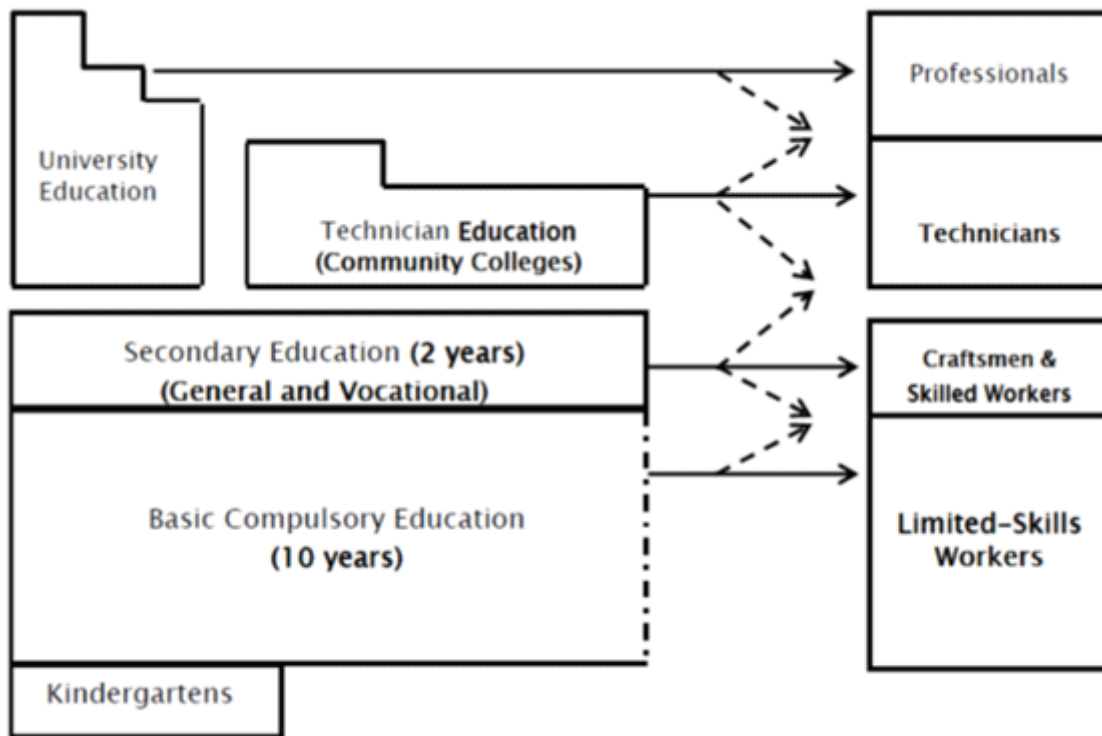


Figure 1. Relationship between the educational levels and occupational levels (Source: World TVET Database - Country Profiles- Jordan).

which are:

1. To have a related course in school education starting from early grades called Vocational education. However, this course has many problems in its curriculum design and implementation.
2. To have a vocational guidance committee in the school that plays a role in guiding students towards appropriate educational and career choices in their future. It was ascertained that this committee is not adequately activated.
3. Launch initiatives from time to time so as to provide job opportunities for people including upskilling and qualification initiatives that are usually implemented cooperatively by the governmental bodies, the formal and private training providers, and the private sector. These initiatives are slow in achieving the targets since Jordanian VE graduates do not have the appropriate aptitude to work in vocational sites.
4. To reform legislations concerning acceptance of vocational education and training graduates in the tertiary education. Although this increased the numbers of students who enroll in VE programmes, minority of them achieve enough GPA to join the university education, and they do not wish to join the vocational work.
5. To try to disseminate awareness of the importance of manual and vocational work through the public media,

but the current programmes are not strong enough to achieve the target.

Despite all these aspects of promotion of VE, learners still avoid to enroll in its programmes. Also, majority of those who enroll in VE programmes take them as a bridge to join university education- not to join the vocational work sector (Al-Tweissi, 2013). The employment and TVET (E-TVET) Strategy (2005) sets the following targets in TVET for the period of 2006 to 2015 (UNESCO- UNEVOC, 2012):

1. Adopt a two-pillar approach in planning for employment and TVET considering:
2. The characteristics and needs of the labour market, and (2) the abilities and needs of the trainees;
3. Develop the capacity of TVET agencies in line with their roles in planning, policy design, and resource development, as well as activities related to follow-up, monitoring, evaluation and networking;
4. Diversify the number and type of TVET providers and ensure their coordination and cooperation;
5. Promote women's participation in TVET and encourage their involvement at the planning and executive level;
6. Encourage media's promotion of TVET as a way of enhancing positive attitudes towards vocational and

technical professions, and towards women's participation in TVET training and employment;

7. Initiate, institutionalise and upgrade channels between the demand and supply side of TVET - including legislation, information and resource development systems, occupational classification and standards, career counselling and employment services, etc.

8. Promote TVET research by cooperating with universities and other TVET stakeholders.

9. Consider and apply international best practices in TVET with the objective of developing national planning capabilities.

10. Develop legislative tools and create an adequate legal framework for TVET.

11. Develop organisational structures that link general education and TVET allowing for greater flexibility of the TVET system.

12. Highlight and promote women's role in TVET.

13. Establish the Higher Council for Human Resources Development to undertake responsibilities related to planning, policy-making, and coordination of human resource development (HRD) at the national level; and establish the E-TVET council to undertake activities related to planning, policy-making and coordination for employment and TVET at the national level

In a response to the national needs, His Majesty King Abdullah launched the National Strategy for Employment and its executive program for 2011 to 2020 in 2012, which focuses on helping youth find suitable jobs. The strategy aims to support programmes designed to provide graduates with funding to carry out pilot projects across the Kingdom as well as establishing start-ups. Moreover, the National Strategy for Employment has developed solutions and practical mechanisms to address unemployment by providing and expanding vocational training programmes that allow paid training in collaboration with the private sector (UNESCO-UNEVOC, 2012).

The issue of students' avoidance of joining VE in Jordan has attracted the interest of researchers since the last two decades of the last century. Mdanat and Naser (1982) aimed to explore the effect of the socioeconomic reasons, father educational level and students' achievement on the attitudes of the 3rd preparatory male students towards VE. Results indicated that students' attitudes towards VE are not significantly influenced by the difference in the family income levels, the levels of parents' education and students' achievements.

Al-Shawaqfah (1991) conducted a study aiming at exploring the Jordanian Community attitudes toward crafts education, and their relation with the variables of (individual's educational level, gender, and the different careers they had taken up). The results indicated that there was significant difference among the people of the Jordanian community regarding craftsman education

which can be attributed to the various careers they had taken up and for the benefit of the two reasons related to manufacturing industries. There were also significant differences of attitudes among Jordanians towards craftsman education which can be attributed to the difference in individuals' university education with no significant difference due to the gender differences. A study by Al-Ja'nini (1992) explored the 10th basic grade students' attitudes, and concluded that there was a positive influence towards VE with no effect of the variables of gender, place of residence, and of parents' level of education and the nature of their work on the children's attitudes towards such kind of education.

During the past decades, a number of Jordanian scholars addressed students' attitudes towards VE in general. Al-Sabaibah (1998) studied revealed that students' attitudes towards VE were positive with no difference due to gender or level of achievement, but with difference due to the level of parents' education. Al-Banawi and Al-Ghazwi (1999) also conducted a study to explore students' attitudes towards VE regarding social status, economical aspect of education and the possibility of providing job opportunities for its graduates. The study results revealed that VE had a negative social status among the study sample with insignificant differences between males and females towards the social status of the VE. Students' attitudes towards the VE ability to provide financial returns were positive with a significant difference of students' attitudes towards the financial returns of VE in the light of gender and the level of the family income variables. Most of the study sample stated that the family conditions influence students' attitudes towards VE, and that such attitudes differ according to the level of the family income. Al-Alwan (2001) also conducted a study to explore the status quo of the 1st Secondary Vocational students' attitudes towards VE in rural and urban areas. Attitudes were found to be positive, and students' attitudes in urban areas were more positive. There were no significant differences in students' attitudes that can be attributed to the career type of parents, their educational level, and the family monthly income. There were also significant differences in the students' attitudes towards VE that are attributed to students' way of joining VE mostly for the optional.

In Palestine, Abu-Asbah (2005) studied the main problems of VE at the vocational secondary schools from the point of view of teachers. The results showed no significant differences regarding the VE problems that can be attributed to gender or class variables. Migdadi (2007) conducted a study to explore the VE reality in Jordan, its most important problems and ways of improving it. Despite the medium positive attitude disclosed by the study, it showed that there are positive attitudes towards the development of VE in Jordan in the future. Al-Farah and Abu-Samaha (2010) conducted a study which aimed to identify the attitudes of secondary

school students towards VE. The title was derived from the results of the GCSE exams for the year 2010 since they showed a decrease in the success percentage of 2010 in comparison to previous years. Results revealed that the educational levels of students' parents who enrolled in academic education were higher than those of VE students. This means that parents of students in the academic education guide them towards university education, and that the ninth grade student achievement was better than the achievement of those at the vocational training centers and secondary VE.

The study also showed that most of the study sample subjects expressed their desire to pursue their academic study. This means that VE which aims to supply the labour market with appropriately skilled people missed its target to convince students to transfer to this field. The motives behind students' joining VE were various, among them were the personal preference, the achievement average, the desire to get a job opportunity, the desire to get good income, parents' preference, and teachers' advice. Students of VE also showed more inclination to work after graduation, with a limited effect on the side of academic education students who studied the course of PVE to show a limited inclination to work after graduation. Secondary school vocational students showed more belief of the community's respect of vocational work. The image of the vocational education was not so clear through this study among all the study subjects since 50% of them only were aware of the kinds of vocational work.

In a closely related issue, Al-Tweissi (2013) carried out a study of the proposed solutions to improve community negative image towards vocational and technical education making use of experts' opinions. The nature of the solutions was classified into six domains: curricula and methods of instruction and training, infrastructure and the learning environment, policies and legislations, media and communication, programs for education and vocational guidance, participatory relation among bodies relevant to VE. Solutions related to curriculum included proposals that educational materials should keep up with modernity; allowing students to actively share in the implementation of the VE lessons in a way that fosters their attitudes and vocational tendencies; variation of the teaching methods of VE; in addition to enriching its curriculum by enhancing respect to manual work and to people doing such work; in addition to activating the promotion of the vocational work as an occupational choice for income; activating the role of parents and field visits to real workplaces particularly for students in higher grades, making use of the participatory relations with the private sector and the international bodies to implement initiatives that serve vocational awareness; conduct continuous campaigns for vocational awareness, through Radio and TV. Finally, it was suggested to reduce the fees of study, and to award special allowances to

graduates of VE.

As for the Eastern Arab Countries, Chammas (2007) conducted a study where she summarized the events and results of the conference of enhancing the social image of VE in the Eastern Arab Countries. It ascertained the importance of initiatives that could contribute to enhancing the social image of vocational and technical education through introducing real modifications to the relevant policies, legislations, curricula of teaching and training, in addition to systems of vocational guidance and counselling. It also stated that the private sector can participate in meeting some of the needs of VE and training sector, in addition to participating in curriculum development to enhance work and training environment, in addition to the importance of the role of the media in guidance and vocational counselling.

Schools have a vital role in vocationally guiding students and helping them in taking the future vocational decision. It was since the beginning of the 20th century when talks began about children vocational development in the USA when Pearson introduced a program for vocational counselling for children in 1909 when they leave elementary school on to work (Porfeli et al., 2008). Liu et al. (2007) consider that the childhood stage which extends up to the age of 14 is considered a vital stage in the vocational development of children. They also see that the VE of work provided by the school curriculum to students is considered by many as the basic foundation for VE all through their life. Watson and McMahon (2007) state that vocational development during childhood didn't receive the sufficient attention compared with VE of students. The kind of the educational and cultural context the child receives determines the kind of vocational interests a child forms all through their going to school (Watson et al., 2011). Creed et al. (2005) state that the societal influence that begins from the family greatly contributes to the kind of vocational interests formed by the children. Therefore, schools have to play a critical role in positively supporting students' interests formed through the social context they live in. This can be done through making such interests more realistic by being compatible with the child's physical and mental abilities and to the community needs.

Thus, Yawkey and Arnion (2001) consider that activities related to the world of work which children receive through the school curriculum contribute in formulating the vocational interests, and that it would be the same in its importance whether for the small children or for those who approached completing their basic education. The most important thing from the emotional point of vocational choice lies in the early experience of children. The various vocational components such as decision making, self-awareness, awareness of human dimensions of the work are considered critical factors in formulating the personality of students. Its effect stays far long in the vocational behavior, choice, attitude, and in

the way people invest their time. In addition, the kind of the tasks which may contribute in making vocational development among children can be summarized by: acquiring human work habits, learning how to organize time and energy in a way that helps in achieving work and learning that work is prior to play.

In addition, Watson and McMahon (2008) demonstrate that the most important components are: to develop certain kinds of motional skills, interpersonal and basic learning skills in addition to attitudes towards work in general and working in certain careers, and information about work and who works there and that the valuable development should be the basis of both the general education and VE.

Porfeli and Lee (2012) consider that building a vocational personality consists of tasks that should be included in the school curriculum such as career exploration, career commitment and career reconsideration. Career exploration includes wide and deep learning about a certain domain of life and exploring the world of work to ensure making a better understanding about the self and the future vocational choices appropriate for the self. Career commitment takes place through making decisions about the future career and considering the personal identity of the individual. This requires a long-term process of shaping knowledge and developing the self-concept in order to approach the right vocational choice and commitment of this choice. As for the career reconsideration, it is concerned with the comparison of available opportunities and selecting one of them after the individual had formed a commitment towards a certain career, and formed flexible attitudes towards his future career. This requires learning reflection to be able to consider his commitment.

The process of vocational choice becomes complicated when the factors affecting it become multiple and continuous. As for the formal approach, specialists determine 4 stages to obtain the right VE which leads to taking the right vocational decision. In the first four grades, the world of work and its relation to life is introduced, in addition to introducing the children to the careers through their main groups, their names, and some of the tools commonly used in them. This is known as career awareness. In the 5 to 7th grades, students are introduced to more detailed information about careers, their names, and tools in addition to enabling them to implement some works that may benefit them and their families domestically. The higher basic grades (8 to 10th basic grades) introduce students of careers in a more detailed way. Students carry out vocational tasks similar to those carried out by specialists at the labour market in a way that is compatible with the student's desire and capabilities, and the nature of actions practices in their environment with the aim of the students' discovering their abilities and vocational interests. When the stage of the basic education is over, students must have chosen

their future orientation in their life (Academic or vocational, and the vocational specialization in case of choosing the VE domain). Students study specialized knowledge and skills that foster their ability to achieve works as they are in the developed and changeable labour market. This stage is called career preparation (Al-Sayyed, 2009).

Vocational choice is influenced by the invisible approach resulting from parents' expectations and experience, and effect of peers, media of its various kinds and from simple preconceptions formed by students as a result of the interaction of all these factors. The ways to deal with the various effects on the career choice are under theoretical approach without considering how to address them in practice (Porfeli and Lee, 2012). Hence came the idea of this study.

The study problem and questions

Despite the concern of the Ministry of Education and all the establishments which provide VE of education, statistics show a great decrease in the number of students joining the VE. The distribution plan of the 10th students for the year 2011 to 2012 on the educational streams show that 70.3% of males joined the academic education compared with 16.5% who joined VE, and 9.8% were distributed on the centers of the vocational training corporations for their low achievements. As for females, 85.45% joined the Academic education, while 9.4% joined VE, and 8.1% were distributed on the vocational training centers. The clear variance between the academic and VE requires investigating the reason's which influence students' choice of the secondary education whether it be social, educational, personal, vocational or economic. This study addresses the reasons behind students' avoidance of joining the VE through answering the following questions:

1. What are the personal reasons which lead to students' avoidance of joining the VE?
2. What are the social reasons which lead to students' avoidance of joining the VE?
3. What are the educational reasons which lead to students' avoidance of joining the VE?
4. What are the economic reasons which lead to students' avoidance of joining the VE?
5. What are the vocational reasons which lead to students' avoidance of joining the VE?

Aims of the study

This study aims to identify the reasons affecting students' decision of not choosing the VE, and which lead to their avoidance of joining it. This could serve the ultimate goal of analysing such reasons and to propose some

suggestions to mitigate their influence.

Importance of the study

The importance of the study stems from the importance of enrollment in VET, since it positively affects providing the labour market with various workforce. This contributes in achieving balance between offered and sought jobs, and fills a gap in reducing un-employability, since most of the offered jobs are in vocational areas, and very minor jobs are offered in the office jobs. This is a corner stone of the social and economic development. In addition, it could reduce the burden on universities when students join the labour market after graduation without seeking university. Care about guiding students and encouraging them to join VE through addressing the reasons for the low level of joining it leads to them acquiring the skills necessary for labour market which in turn activates their role in the society. Therefore, schools' curricula should work on building the ability to make the appropriate vocational decision.

The results of this study are useful to all educational institutions, such as the Ministry of Education in improving students' educational opportunities that may guide them to join VE, in addition to the Vocational Training Corporation (VTC), social institutions and media to activate their roles in contributing in guiding students towards joining VE. In addition, curriculum developers for all stages of education will benefit from these results by stating what can be done (regarding curriculum) to improve numbers of students' joining VE. Parents also benefit from the results of the study by becoming more aware of the reasons that may influence their children's choices of future careers. And so work on providing the best guidance for them to make more realistic decisions regarding their vocational future.

Terms of the study and their procedural definitions

The study includes a group of terms that should be identified. These terms are:

Vocational education

This is the kind of systematic education which includes educational preparation, skills, attitudes acquisition and vocational knowledge. This is carried out by the systematic educational establishments at the level of the secondary education for a period of two years preparation after the 10th basic grade, for the purpose of preparing skilled workers in the various industrial, agricultural, house holding and hospitality streams in a way that provides them with the ability for productivity. VE usually includes various programs and specialization that are

compatible with the work field requirements to prepare the qualified workforce which includes: industrial, agricultural, commercial, hospitality, nursing, child care, cosmetics careers, dress-making and others (Mahasneh, 2010).

Reasons of students' avoidance of joining VE

These are reasons which influence 10th grades students' decisions to choose the vocational stream which will join at the end of the basic educational stage. These reasons were specified in the questionnaire, and the degree of their influence on students' decision was measured through estimating it on a questionnaire that was built for this purpose. These reasons were divided into: economic, social, personal, educational and vocational reasons.

Personal reasons

These are reasons stemming from the individual characteristics of the learner such as their abilities, ambitions, interests and perceptions which learners hold about life, work and learning, which force them not to join the VE.

Social reasons: These are reasons related to the various social chains (parents, family, peers and society) which force students not to join the VE.

Educational reasons: These are reasons related to the school reality (general and vocational) regarding their capabilities, curricula, reputation and the image hold of the VE which force students not to join the VE.

Economic reasons: These are reasons related to the financial income, unemployment and job opportunities in the various vocational sectors which force students not to join the VE.

Vocational reasons: These are reasons related to the nature of the vocational work, working hours, promotion opportunities, security and safety reality of workers.

METHODOLOGY

The descriptive analytical approach was used because it is appropriate for the study; the reasons for students' avoidance of joining the VE were identified through a closed end questionnaire administered to students themselves. Items of the questionnaire were initiated from qualitative results of a pilot study.

Study sample

Students' sample was selected from five Education Directorates of

the central district of Jordan, with 6 teaching classes for each directorate (3 male, and 3 female).

The directorates were randomly selected out of the 22 education directorates. Schools were also selected randomly from within the directorate schools. Classes were also randomly selected from the 10th grade classes at the schools when they had more than two sections. The total number of students was 1050 including 502 male and 548 female students.

Study instrument

Pilot study

A pilot study was conducted to identify students of the 10th grade avoidance of joining the VE and the reasons for this. Students were asked two open questions: Question 1 Do you intend to join VE? and Question 2 was If your answer to the first question was "no", why didn't you join the VE?. The pilot study was conducted on 243 (male and female students: 126 male and 117 female) in six classes: 3 classes for males and 3 classes for females, from schools that didn't receive the main questionnaire. The pilot study showed that 94% of students didn't intend to join VE, they showed many reasons which were useful in building up the questionnaire which aimed to identify the reasons and their degree of contributing to students' avoidance of joining VE. In the questionnaire, the researcher tried to use the vocabulary that is close to that used by students to ensure the highest degree of students' understanding of its items.

The questionnaire

The questionnaire aimed to identify the reasons that affect the decisions of 10th grade students which contribute to their avoidance of joining the VE. The questionnaire consisted of 39 items distributed into five domains: personal reasons (8 items), social reasons (9 items), educational reasons (11 items), economic reasons (5 items) and vocational reasons (6 items). The response was a five-point Likert scale to estimate the degree of each reason's contribution in students' avoidance of joining the VE (very high, high, medium, low, very low). To confirm the validity and reliability of the questionnaire regarding content and formulation, the questionnaire was shown in its preliminary form to a panel of experts including five faculty members from Jordanian universities who were asked to judge each of the five domains of the instrument items and their ability to measure what they were intended to measure. Some items were modified upon the experts' suggestions. As for reliability, it was calculated by test-retest on a pilot sample of 200 students from the study population and from outside the study sample twice with an interval of two weeks between them. The value of the stability co-efficient was found to be 0.88.

Statistical analysis

Students' responses were coded and entered into statistical package for social sciences (SPSS) (very high degree=5, high=4, medium=3, low=2, very low=1). The means and standard deviations were used. To facilitate judging the values of the means, the grading was redistributed into three categories (high, medium and low) instead of five. This was carried out by dividing the range of 1-5=4 on the new number of categories (3). The result was 1.33 which is the range that each category falls within. The level of the reason's contribution to students' avoidance was low if the means

Table 1. Means and standard deviations for the domains of reasons for students' avoidance to VE.

Domain	Mean	S.D	Level
Vocational reasons	3.13	1.49	Medium
Personal reasons	2.80	1.47	Medium
Social reasons	2.78	1.57	Medium
Economic reasons	2.77	1.44	Medium
Educational reasons	2.62	1.42	Medium
All domains	2.82	0.60	Medium

value ranged between 1 to 2.33, and medium if the means was between 2.34 to 3.67, and high if the mean was higher than 3.68.

RESULTS AND DISCUSSION

The domains were: Personal reasons, social reasons, economic reasons educational reasons and vocational reasons. The means and the general means of reasons were recorded. Table 1 shows the means and standard deviation for the reasons which lead students to avoid joining the VE.

Table 1 shows that all the domains of the reasons of students' avoidance of joining the VE had a medium effect. The vocational reasons were the highest influential reasons with a means of 3.13, the educational reasons were the lowest influential reasons with a 2.62. To illustrate the details of the results in each domain, results of the study will be displayed and discussed according to its questions. Discussion will focus on the factors of the emergence of the reasons for avoidance, with only pointing out the main aspects of solutions, since the researcher will study solutions in details in another stage of the project.

Results of question 1: The personal reasons

Table 2 shows the means, standard deviations and grades of the personal reasons which lead students to avoid joining VE. Table 2 shows that the general level of the effect of this domain on students' avoidance of joining VE was medium. The item 'VE contradicts with my academic ambitions which discourages me from joining VE' was the highest with 3.39. The item 'My personal desire doesn't motivate me to join VE' was the lowest with 1.94 which is the only reason that was estimated of low contribution to avoidance of VE.

Contradicts with academic ambitions

The item 'VE contradicts with my academic ambitions which discourages me from joining VE' showed the most

Table 2. Means, standard deviations and levels of the personal reasons for students' avoidance of VE.

Rank	Personal reasons	Mean	S.D	Level
1	VE contradicts with my academic ambitions and doesn't encourage me to join it	3.39	1.49	Medium
1.	VE doesn't offer me a high social status which alienates me from joining it	3.07	1.41	Medium
2.	My physical ability doesn't enable me to join the vocational stream that I like	2.99	1.45	Medium
4.	VE doesn't allow me to join the university with less effort than academic education	2.94	1.47	Medium
5.	VE doesn't allow me to develop my abilities, skills and practical abilities. This doesn't encourage me to join VE	2.93	1.47	Medium
6.	VE doesn't allow me to compete on university seats which made me refrain from VE	2.68	1.49	Medium
7.	The condition of working at the labour market makes me unwilling to join VE	2.45	1.26	Medium
8.	My personal desire doesn't motivate me to join VE	1.94	1.29	Low
Total mean of personal reasons		2.80	1.470	Medium

Table 3. Means, standard deviations and levels of the social reasons for students' avoidance of VE.

Rank	Social reasons	Mean	S.D	Level
1.	My colleagues' attitudes discourage from joining VE	3.31	1.73	Medium
2.	My family's academic attitudes don't foster my attitudes towards VE	3.14	1.59	Medium
3.	My family members' unwillingness to join VE alienates me from it	2.93	1.61	Medium
4.	Society negative attitudes towards VE alienates me from joining it	2.73	1.42	Medium
5.	My father's academic achievement discourages me from joining VE	2.69	1.59	Medium
6.	Services provided by vocational corporations for VE students don't contribute in my orientation towards VE	2.66	1.36	Medium
7.	My feeling that I am lower than my colleagues who joined the academic education limits my orientation towards VE	2.66	1.62	Medium
8.	My colleagues' lack of mastering vocational skills discourages me from joining VE	2.52	1.74	Medium
9.	My family considers VE a waste of time at school which negatively influences my decision to join it	2.50	1.50	Medium
Total mean of social reasons		2.77	1.45	Medium

influential of students' decision to join VE. This requires that students should understand that life is not all about academic studies in addition to the necessity of understanding the relationship between their life ability and the vocational attitudes they follow. Hence appears the necessity of the curriculum working on getting the students to be aware of their abilities and interests so as to be realistically guided (Helwig, 2008; Freihart, 2000).

VE and the high social status

The second item of this domain was VE doesn't provide a high social status which makes me refrain from joining it. This reminds us that people look down on VE unintentionally fostered by some official parties, which influenced the VE reputation in Jordan and the Quality of its outcomes. The Ministry of Education distributes the 10th grade students on the various educational streams based on their academic achievements and average.

This is a fatal mistake. There is a weakness in the feeling of the VE graduates of feeling proud and belonging to their vocational community because of this opinion. This requires working on changing this image which underestimates the value of manual careers, and creates a personality that is proud of its career. It also requires reconsideration of the school curricula to pay more attention to respecting careers and whoever works in them. Minhua (2015) mentioned that the social reproduction of the bad image of vocational education is dominant, and the school efforts fail to improve its image among students.

Physical abilities of students

The third item of this domain which influenced students' decisions was connecting the physical ability with joining the VE which means the necessity of educating students of their physical abilities and the kind of careers that are

fit for them. Each vocational stream has its own special skills that should be possessed by the students. This also requires giving students the chance to strengthen their physical abilities by fostering and caring about the physical training classes. In addition, the right vocational decision requires that the student should be aware of the requirements needed to achieve the various kinds of work whether it be vocational or others. This requires that school curricula should address through their various topics related to careers, their mental, physical, and specialization requirements. This would render the school teaching a kind of guidance to join VE, and thus joining vocational jobs in the future (Okorosaye-Orubite, 2008).

Social status and higher education

The item related to the high social status comes fourth. This indicates that students think that VE doesn't provide it. This belief stems from the society heritage which the Jordanian school didn't succeed in changing it, although status quo indicates something different (Yusuf, 2012). Many people who worked at the various vocational sectors earn incomes more than their peers who joined careers that required academic education. To solve this problem, the education should provide realistic information and success story about the financial income received from certain jobs, and about the social status occupied by some of those who enrolled in traditional careers (Porfeli et al., 2008). Minhua (2015) mentioned this as one of the factors that could help "better" students enroll in vocational education in China, mainly for migrant societies, since such societies usually suffer from bad economic situations.

VE and development of individual's potentials

The item 'VE doesn't empower me to develop my potentials, skills and practical abilities which discourages from joining it' was fifth. This indicates that some students believe that those who join the VE can't develop their potentials, abilities and level at the occupational ladder. This is not right. Through the system of vocational classification and characterization- developed and managed by the VTC, anyone who joins VE, whether during his study or after completing it (when joining the work) can sit for the tests of job practice on its various levels. In case of his success in a level that is higher than the level he is currently in, he gets official certificates that enable him to be promoted at the work place or to submit for higher level jobs. This is considered one of the aspects that the school curricula must educate students about; the various Government systems in all kinds of life should be addressed by school curricula to qualify individuals to deal with future life (Al-Tweissi, 2013),

included in Jordan, the knowledge of an important corporation VTC that cares about training individuals and qualifying them to join labour market, and organizes the labour market including all tasks affiliate to such task. McMillan and Marks (2003) emphasised the importance of such organisations and systems that took place early particularly for school leavers.

No way to go to university

The sixth rank was to the item 'Not allowing students of the VE to compete for the university "seats" made me refrain from VE'. The students' previous perception of not being able to be promoted at work is connected with the idea that VE doesn't lead to students' joining the university. Two things are connected with ideas which the curricula should inform students of, which are: VE is one of the educational tracks according to the educational policy in Jordan, and that there are no barriers to prevent those who pass the required additional theoretical courses from joining the university education. The second issue which the researcher considers as the most important is related to the mistaken societal belief that every student should join the university which should be discussed at all the societal levels because some of the simple vocational tracks have a promising future far better than the future of some students who join university specializations that don't provide job opportunities. Moreover, such issue should not be discussed until students are about to complete the basic education stage for fear that students take it as a pretext so as not to care about their education. If reliable statistics and studies were available about the income rates and internal and external job opportunities in addition to promotion chances and could be used in teaching, this may make teaching more convincing and useful (Al-Tweissi, 2013). This was emphasised by Sikora and Saha (2011) for building the students' career plans for the high school and the higher education stage.

Work conditions at the labour market

The influence of the item 'The condition of working at the labour market makes me unwilling to join it' was medium. This may be referred to the stereotyped image in students' mind of the labour market produced by media or social heritage which is connected with the nature of the work with dirty clothes and very long working hours. This emphasizes the fact that students don't realize the various levels and kinds of work. Working on selling goods at a market or at the street is different from working at an organized store or workshop or factory, or a craftsman service work at a private establishment or governmental department. Students may not realize that

some careers bring in profitable income through working at home without the need for an official employment (or regular work at an establishment). There are numerous careers such as house electrician, plumbers, tailors, and health related jobs or barbers that provide a proof of that. Therefore, school curricula are required to educate students of the fact of the variance of work conditions, work requirements and available opportunities at present and in the future. Wilson (2011) pointed out that having a clear image of the working conditions is crucial to the career choice of students. Along with the previous interpretations, student's estimation of the fact that their refusal of vocational work was personal (Item 8) was low. This may indicate that their response was defensive resulting from their weak perception of the facts provided at the discussion of the previous items.

Results related to question 2: The social reasons

Table 3 shows the means and standard deviations of the social reasons that lead to students' avoidance of joining the VE. Table 3 shows that all the social reasons were at the medium level regarding their contribution to students' avoidance of joining VE.

Colleagues' attitudes and mastery

The most influential item in the social reasons was 'My colleagues' attitudes discourage from joining VE'. This shows the great deal of students being influenced by their peers' attitudes which are originally influenced by the society and family attitudes to which these peers belong. A student may feel inferior if s/he saw his colleagues' orientation towards academic education while s/he joins the VE. Marks (2010) pointed out this issue and urges about its role in misleading of the career choice. In addition, the negative image that comes with colleagues who already joined VE through their lack of mastery of the skills also contributed to the students' avoidance of having VE as their pathway for future careers (item 8). This is also linked to the poor services that are provided to the students and graduates of VE (item 6). Students and graduates need to be followed up in order to find good opportunities for practical training that could lead to employment in the same place of training; they also need to be followed up after graduation to find job opportunities that allow them to continue their career life. Luke et al. (2006) in their study emphasised this need through their study of literature for various VE and training programs.

Low achievers join vocational schools

This is a scholastic issue concerned with the regulations

distributed on students to select their specializations at the secondary stage based on their academic achievement rates. This led to the fact that most students who joined the VE don't master the skills they study because of their low achievement level and other factors related to school and education. Therefore, those who have not chosen the stream that they would join would be negatively influenced. The school curricula should work on changing this image among students, so that future generations (their children) would come to school with positive attitudes about VE. The relationship between students and the teaching staff should be promoted to be able to advice and guide students instead of receiving guidance from their peers.

Family attitudes

As far as the family is concerned, the family members' attitudes don't foster students' orientation towards VE. This is a general attitude of the whole society that considers academic education as the way to secure a better future, and a higher social status than working at the vocational labour market. This is a social "heritage" that may contradict with reality- as mentioned earlier. Things were aggravated when the parents' academic level is high (as an indicator of social status) leading to hindering sons' joining the vocational domains. Taking the economic status quo into consideration and the reality of the vocational labour market, - existence of unemployment- it is supposed that individuals should be more aware (scientifically) through guiding their children to more realistic orientation so that they would not become unemployed.

Minhua (2015) mentioned that the social negative image of VE in the rural areas of migrants in China prohibited students from enrollment in VE except for those bad ones who continued on the same behavioral style in vocational schools; a factor that reflected a negative image of the schools themselves and the careers that are taught in these schools. Thus, the process became a kind of continuous reproduction of the same kind of students studying in these schools and working in these careers.

In general, the item 'My family members' unwillingness to join VE alienates me from ' shows that the family instead of leaving it for their sons to freely choose what they desire, they push them towards not joining the VE. This is considered as a kind of hidden curriculum that breaches what the school calls for. If the school works on making students to be aware of VE, and make them make decisions based on their abilities and the labour market potentialities it will go a long way in helping them, but the family plays an adverse role to the extent that some families consider joining VE a waste of time. This may be caused by the status quo of the vocational

schools- and the unemployment of their graduates- in addition to the society's traditional image which was previously mentioned (Marks, 2010).

Societies' like office jobs

Societies' desire to work at office jobs or jobs with high social level negatively affects students' vocational decisions. Students estimated that the negative social image towards VE alienates them from joining it. They believed in that because of the inefficiency of the vocational corporations including educational establishments, unions and Societies in providing the appropriate guidance for the society individuals to join such careers (Yusuf, 2012). This lead to the implantation of the traditional image among people- including students- that VE is inferior and so such careers became excluded to expatriate workers, supported by the relatively low wages paid to these workers without employers making any adequate effort to make Jordanians join such careers- may be, they are reluctant to do so. This made the government stop hiring foreign workers in some of the careers seeking to employee Jordanians in them. But things are aggravated. The VE graduates are not reasonably qualified, wages are low, in addition to the negative attitudes of the society towards joining VE and careers. Lamb and McKenzie (2001) mentioned that educational systems might fail to make a successful transition from school to work if the work conditions are negative. Therefore, work conditions in general should be enhanced in order to have a long term effect on employment of graduates in order to enhance attitudes towards the vocational work sector and vocational education.

Results related to question 3: Educational reasons

This is related to the curriculum in general, and to the VE subject in particular and to the status of the vocational schools in Jordan. Table 4 presents the results of its items. Educational reasons obtained a medium grade too with a means of 2.62. The highest mean was for 'Vocational schools' reputation makes refrain from studying there' with a mean of 3.03. The lowest means which was 2.34 was for the item 'Lack of seminars and meetings held by vocational professionals at my area for students makes me ignorant of VE'.

Vocational schools' reputation

The most influential items on students' vocational decisions was 'Vocational schools' reputation makes refrain from studying there'. This may be referred to students' tampering inside workshops and their deliberately stirring up problems. In addition, students are

not regular in coming to schools because of lack of adjustment with the educational stream they had joined, lack of motivation and academic abilities among students who are enrolled in the Academic streams which leads to low achievement (Al-Adwan, 2009). Considering the fact that these students didn't join the vocational schools and hadn't seen them from the inside, the negative reputation formed in the society and among the students of the Academic schools, stemmed from the kind of students who originally joined such schools because they were forced to do so because of their low achievement level. Students' behaviours, lack of interest, rise in the percentage of absence and drop out, the daily early school leaving came as a result of lacking motivation among these students who were forced to join specializations that they don't desire or at least don't have enough information about them. Minhua (2015) emphasised the effect of the vocational school image on the reproduction of 'bad' students, a factor that continuously affect the quality of VE graduates. This raises the need to enhance the vocational schools through a multi-dimensional plan that address the physical and human resources in addition to students who enrol in these schools.

VE is perceived unimportant

The second statement which states:

My feeling that the VE subject is not important discourages me of joining VE.

Refers to students' feeling that the VE subject is not a basic course. The introduced curricula may not be interesting. The teacher has a vital role in forming this opinion towards the VE subject. Some teachers don't carry out the activities available at the subject (Al-Saaideh, 2011; Daghlas, 2004). Instead, teachers teach the material theoretically without giving students the chance to use the workshops. This helps in forming a negative opinion that degrades it, in addition to linking the subject with the inferior social image of VE which calls for activation of the PVE subject through making various vocational activities, reconsideration of curricula introduced to students to create a kind of balance between what the students should be taught concerning information and of experience and skills to achieve the curriculum objectives. Herault and Zakirova (2015) emphasized that delivering knowledge about the world of work and information about careers is fundamentally the role of the school.

No idea about field experience

The third item states:

Table 4. Means and standard deviations and levels of the educational reasons for students' avoidance of VE.

Rank	Educational reasons	Mean	S.D	Level
1	Vocational schools' reputation makes me refrain from studying there.	3.03	1.44	Medium
2	My feeling that the VE subject is not important discourages me of joining VE	2.94	1.51	Medium
3	The field visits we made to vocational schools discouraged me from joining VE.	2.7	1.32	Medium
4	The lack of lessons related to careers in the curriculum discourages me from joining VE.	2.64	1.54	Medium
5	Depending on the low achievement level when assigning students to VE discourages me from joining it.	2.62	1.35	Medium
6	The practical vocational activities don't encourage me to a sufficient level to join VE.	2.56	1.46	Medium
7	The VE topic which I previously studied are not so interesting that they foster my orientation towards VE.	2.55	1.49	Medium
8	The number of the PVE lessons compared with other lessons is few and doesn't excite me to join VE	2.53	1.46	Medium
9	Different media doesn't encourage me to approach VE	2.48	1.31	Medium
10	Buildings, facilities and equipment are old and don't motivate me to join VE	2.41	1.37	Medium
11	Lack of seminars and meetings held by vocational professionals at my area for students makes me unaware of VE	2.34	1.26	Medium
	Total mean of educational reasons	2.62	1.42	Medium

The field visits we made to vocational schools discouraged me from joining VE

Reasons are attributed to students' dissatisfaction of the location of workshops and the way they are built. They may be old and lacking the facilities and services students might need. These visits are few and only take place in one class (10th grade) and most frequently just for once (Yusuf, 2012; Al-Saaideh, 2011). Field visits would render PVE teaching a kind of guidance to join VE, and in turn joining vocational jobs in the future (Okorosaye-Orubite, 2008).

Lack of content related to careers

Students showed that the scarcity of the vocational content in general whether it was related to technical skills or guidance or counselling or statistics, about the reality of the labour market made students less aware of the VE. One's ignorance of anything makes one move away from it. Most of the time, it is pointed to the academic inclination in curricula in the 3rd world countries despite the need for the vocational inclination because of the abundant job opportunities that are more than those available for office jobs related to academic studies (Psacharopoulos, 1997). In Jordan, this raises the need to review the whole educational provision in

relation to vocationalism and career education.

Achievement as a criteria (no choice)

Educational policies play a role in dedicating the negative attitude through adopting the educational level as a basis to categorize students, forcing those with low achievement to join VE. Taking into consideration the weak motivation and negative attitudes and the general awareness of this group of people, all of them contribute in moving things backwards regarding joining the VE. Thus, conditions that move students towards optionality in joining the kind of education should be improved in addition to providing opportunities to join university education along with wage improvements. Moodie and Wheelahan (2009) also recommended this for the vocational educational system in Australia.

Status quo of PVE

It becomes clear from the means of the items (6, 7 and 8) that the PVE curriculum, which is part of the curriculum that was prepared to work on improving the vocational awareness of students, is inefficient, which reduced its efficiency in achieving its aims. The activities carried out through the vocational curricula didn't adequately

encourage students to join the VE. This may be attributed to the fact the curriculum focuses in many units on personal life skills without concentrating on practicing real vocational activities in the real labour market. The status quo of teaching in these schools makes teachers sometimes teach the material theoretically without conducting the practical training skills, this was indicated by various studies (Ahmed and Saaideh, 2012, 2007; Tweisat, 1998; Daghlas, 2004) in addition to the unattractive topics included in the PVE curriculum. Results state that the few number of the PVE lessons compared with academic topics doesn't achieve the purpose of encouraging students to join VE. It is known that when student receives deeper content of certain topics they acquire useful and more serious experiences, which makes their attitudes towards that subject more positive and constant (Watson et al., 2011; Liu et al., 2014). Therefore, a holistic review of the PVE delivery is needed in terms of the curriculum objectives, content, activities and assessment in addition to the facilities provided to its delivery.

Lack of seminars and meetings

By looking at the real curriculum, considering media being a part of it, media don't encourage students to approach VE. This may be attributed to the fact that, although there are television educational programs which guide towards VE and joining work, the negative image communicated by drama about VE and careers dominate with this negative influence- as result of their abundance and continuity, over the positive influence of the educational programs. In general, the lack of concentration on the necessity of seeking VE and warning of unemployment in academic specializations makes it worse as time passes by (Al-Tweissi, 2013; Al-Tarawneh, 2000). This is concluded from the results that lack of seminars and meetings held by vocational professionals at various areas for students makes them unaware of the vocational sector and VE in general. Herault and Zakirova (2015) also emphasized that delivering knowledge about the world of work and information about careers is fundamentally the role of the school. Therefore, school relationships with the vocational bodies and the community should be improved, and appropriately utilized to achieve students' awareness about VE.

Students need to meet professionals

If we consider what schools are doing regarding that, the PVE teachers may invite professionals in some occasions to talk to students, or the vocational awareness committees at schools may host a professional to

meet students. This is not enough considering the adverse effect in reality (McMahon and Watson, 2008; Porfeli et al., 2008). Students also stated that the visits they made to vocational school and noting that the buildings and facilities were old reduced their motivation to join VE. This resulted from the indifference of the Ministry of Education to facilities and services at the vocational schools. There was clear contradiction in the previous years between the Ministry's tendencies towards knowledge based economy and what was accompanied by negligence of VE through the lack of opening new specializations, modernizing the contents of the programs and improving the facilities (Mrayyan, 2010). This clarifies the need for new strategy to deliver the PVE curriculum, and the need to enhance and utilize the school relationships with the vocational bodies and the community

Results related to Question 4: The economic reasons

Table 5 presents the means and standard deviation of the economic reasons that lead students to avoid joining VE. Table 5 shows that the economical reasons' contribution in students' avoidance of joining VE was medium. All reasons were estimated at a medium level. The highest means of 3.04 was for the item 'VE doesn't provide me with a good and stable income'. The lowest means of 2.56 was for the item 'Unemployment among the VE graduates fosters my orientation towards academic education'.

Income from vocational careers

Results also revealed that the economic status has negatively influenced students' orientations related to their vocational decisions. Students' feeling that VE doesn't provide a good and stable income discouraged them from joining it. This is attributed to the fact that vocational sectors in general are occupied by expatriate workers who accept to work with less wages than natives do. Students expressed this in item 2, that the presence of expatriate workers forced them to join academic education. It is noticed that students consider VE provide job opportunities that Jordanians don't agree to take up. The reason behind that is that Jordanians in general look for office careers with high social level (according to their own beliefs). This led to having unemployment among the VE graduates, or it led them to join jobs that are not related to what they had specialized in (Al-Tweissi, 2013). Israel et al. (2001) emphasized the importance of the acceptance of the education that leads to vocational careers as a prerequisite to enhance the acceptance of these careers. This again reminds the need to enhance the work conditions and income of the vocational jobs, in

Table 5. Means, standard deviation and levels of the economic reasons for students' avoidance of VE.

Rank	Economic reasons	Mean	S.D	Level
1	VE doesn't provide me with a good and stable income	3.04	1.54	Medium
2	Limited work domains provided by VE doesn't encourage me to join VE	2.78	1.44	Medium
3	The presence of expatriate workers made me avoid VE	2.76	1.45	Medium
4	The presence of sufficient number of workers for the labour market motivates me not to join VE	2.69	1.47	Medium
5	Unemployment among the VE graduates fosters my orientation towards academic education)	2.56	1.3	Medium
	Total mean of economic reasons	2.77	1.443	Medium

Table 6. Means, standard deviation and levels of the vocational reasons for students' avoidance of VE.

Rank	Vocational reasons	Means	S.D	Level
1	The nature of the career which I would like to take up in the future doesn't encourage me to join VE	3.50	1.63	Medium
2	Lack of job security in the fields of VE doesn't motivate me to join VE	3.27	1.5	Medium
3	Danger related to health and safety at VE doesn't encourage me to join VE	3.17	1.41	Medium
4	Opportunities of Job promotion are very limited for vocational schools and centres' graduates. This doesn't motivate me to join VE	3.09	1.43	Medium
5	The low estimation of manual work doesn't encourage them to join VE	3.03	1.47	Medium
6	The lack of new specializations at vocational schools motivates me not to join VE	2.73	1.44	Medium
	Total mean of vocational reasons	3.13	1.49	Medium

addition to enhance the media through which students can be informed about the status of the future careers they intend to take up.

Lack of job opportunities and expatriate workers

It is noticed that such economic factors are interactive since they began with the social belief that VE leads to low levels which made students acquire regretful beliefs; They seemed convinced that the country doesn't provide job opportunities although the expatriate labour occupies a large percentage of the vocational labour market with an timely increasing number. The students object to low wages and full labour market, and that the VE doesn't provide good income. If we look at the interactive structure of pretexts, we find out that the future education of Jordan requires the rebuilding of analytical and critical abilities of students' personality in addition to the development of critical thinking and decision-making, so that they could investigate the reality and analyse it to know the opportunities and challenges to follow the steps of problem solving in order to deal with various contexts. This was emphasized by scholars of the vocational awareness requirements (Watson and McMahon, 2008; Porfeli and Lee, 2012).

Thus the focus of the curriculum on the earlier mentioned skills, which are called the 21st century skills, is considered a vital necessity. During the last century, curricula in Jordan began to change into education based on knowledge economy; nevertheless, a comprehensive evaluation based on the retroactive effect of the curriculum on the society has not been conducted yet. This is a necessity in order to adopt course of corrective actions. This has been emphasized by modern literature when dealing with the vocational development issues for children and the educational systems orientations towards our age challenges (Porfeli and Lee, 2012; Yawkey and Arnion, 2001). Explicitly, the changes that take place in the life of the local, the regional, and the international community, and their implications to the educational systems (at all educational stages) should be studied and continuously reflected on these systems.

Results related to question 5: The vocational reasons

Table 6 presents the means and standard deviation of the vocational reasons that lead students to students' avoidance of joining VE. Table 6 shows that the factors related to the nature of the vocational work were the most influential factors although they gained medium

estimation in making students avoid joining VE.

Students' dreams of the future

The item 'The nature of the career which I would like to take up in the future doesn't encourage me to join VE'. Dreams built by students for their future can't be fulfilled through VE. Each student has the right to draw up a future that he dreams of, and to select the career s/he likes to take up. The most important of that is to build this decision and to draw up that dream to accommodate with students' physical and mental abilities. The dream must be attainable within the economic and educational circumstances. Therefore, education should play (in the whole school age) a role in guiding students' interests and in improving their capabilities and acquaint them of the careers appropriate for such capabilities. This has been emphasized by Yawkey and Arnion (2001) and Porfeli and Lee (2012) as a basic requirement for a sound vocational decision.

The nature of the vocational work (danger and job security)

The perceived reality of the vocational work is reflected on students' beliefs and their vocational decisions. Results revealed that the risks of the vocational work and the issues of health and safety at the vocational workplaces don't encourage them to join VE. Job security which is influenced by the reality of the implementation of the Labour Law and labourers' rights adds to their negative perceptions. Therefore, the reality of the job security at the vocational labour market and the factors affecting it, and the provisions of the Labour Law and its executive regulations are critical issues that students should be aware of. Students should learn to respect them as future workers, or may be as future employers (Al-Tarawneh, 2002).

Limitation of promotion

As for the item 'the opportunities of job promotion for vocational schools and centres are so limited which doesn't motivate them to join VE'. This issue has been discussed in the social factors explaining that it is a perceptual unrealistic issue; promotion opportunities in the VE and the labour market are possible with the presence of the classification and characterization system, and the execution of the various levels of the career practice tests in most of the career groups in Jordan. Society, in general and students in particular, need to be aware of this, through the school curriculum addressing the role of the Vocational Training

Corporation in a more detailed way (Al-Tweissi, 2013; Al-Mahasneh and Al-Saaideh, 2015).

Results emphasize the necessity of respecting the manual work in general. The society doesn't highly appreciate such kind of jobs. Students showed that the low estimation of manual work doesn't encourage them to join VE. The curricula don't play its role through a constant process (Al-Saaideh and Al-Zyouf, 2009). Bearing in mind that respecting manual work is an emotional issue, it requires a long time and continuous follow up to build this respect. Therefore, school curricula should be integrative and not contradictory in focusing on this issue, since curricula in general show that they highly appreciate the office jobs and doesn't concentrate on it being equal with the vocational work. Scholars from various countries mentioned this issue (Porfeli, 2012; Yawkey and Arnion, 2001; Porfeli et al., 2008).

Lack of new specializations

The factor of the lack of new specializations at vocational schools made students refrain from joining the VE. The fact that the specializations offered by the vocational schools are stable without being modernized led to students' avoidance of VE. It is known that mechanisms of conducting work, and the appearance of new kinds of jobs every period of time requires updating new specializations or to update the present specialization to accommodate with the requirements of the labour market. The relation of the VE in Jordan with the requirements of the labour market is one of the issues that has to be addressed. Therefore, it receives a large share of officials' talks and recommendations without proposing mechanisms to achieve them (Mahasneh and Al-Saaideh, 2015; Tweissi, 2013; Al-Syouf, 2007; Nasrallah, 1998).

RECOMMENDATIONS

Through the study results about the reasons that lead to students' avoidance of joining VE, and through analysing the factors inherent in such reasons, the following can be recommended:

1. Conduct research about how avoidance of VE could be reduced.
2. Conduct research to analyse roots of each type of reasons for avoidance of VE (personal, social, economic, educational, and vocational) in order to set plans to treat these reasons at the long term scale.
3. Improve specialties and contents of VE to keep up with the requirements of the labour work.
4. Discuss that the social belief that every student should join the university is a mistaken belief at all the societal levels.

5. The school curricula should educate students about the various country systems.
6. Activate the role of the different media in the educating the society about the role of the VE in supplying the labour market its needs, while paying attention to the image reflected by the media about VE.
7. Students should learn the Labour Law and its executive mechanisms. They should learn to respect them.
8. Take care of the PVE subject and its content in a way that contributes in the vocational awareness of the available job opportunities.
9. Education has to explain careers and their requirements of mental, professional and physical abilities. Students should become aware of their interests and abilities to guide them in a realistic way
10. Reconsideration of the school curricula to create a kind of balance between what should be learnt of information and what is learnt of experience and skills
11. Schools should work on building the decision-making, analytical and critical abilities of students'.
12. Educate students about the variety of jobs' conditions, work requirements and available opportunities at present and in the future.

Conflict of Interests

The author have not declared any conflict of interests.

REFERENCES

- Abdel-Raheem S, Abdel-Majeed Z, Al-Obaidi S (2010). The status quo of VE and reform strategy. *Educ. Sci.* 3(9):159-182.
- Abu Asbah M (2005). Problems of VE at the secondary vocational schools from the teachers' and students' points of view. Unpublished M.Ed. Thesis, Al-Najah National University, Nablus, Palestine.
- Ahmed E, Al-Sa'aideh M (2007). Contexts that force pre-vocational Education teachers to teach in theoretically in Jordan. *J. Fac. Education (Ain Shams University)*, 31(4):38-62.
- Ahmed E, Al-Sa'aideh M (2012). The degree of focus on practical skills in teaching pre-vocational education at Schools of Al-Balqa'a governorate. *J. Damascus University Educ. Sci.* 28(4):447-485.
- Al-Adwan F (2009). The national strategy for career guidance at the Ministry of Education. Ministry of Education, Amman, Jordan.
- Al-alwan S (2001). Difference in vocational tendencies of the tenth grade students between civil and rural areas in Al-Balqa'a Governorate. Unpublished M.Sc Thesis, The University of Jordan, Amman, Jordan.
- Al-Banawi N, Al-Ghazwi F (1999). Students' attitudes towards vocational education. *Dirasat (The social Sciences)* 11(12):26-42.
- Al-Farah W, Abu Samahah K (2010). The attitudes of the secondary education students towards vocational education. *The Teacher's Message* 36:26-42.
- Al-Ja'nini N (1992). Attitudes of the tenth basic grade students at public schools in the district of Madaba towards Vocational Education. *Dirasat: Educ. Sci.* 21(2):89-111.
- Mahasneh O (2011). Fundamentals of Vocational Education. First Edition, Amman: Alam Athaqafah
- Al-Mahasneh O, Al-Saaidih M (2015). The Jordanian Occupational Standards that are needed by the labour market from the point of view of employers and that must be added to the curriculum of the Electric Power. *Dirasat Educ. Sci.* 42(1):219-242.
- Al-Masri M (2003). Economics of the Vocational Education and training. Benghazi, The Arab Center for Human Resources Development.
- Al-Migdadi O (2007). Vocational education in Jordan: Problems and trends to development. Unpublished Ph.D. Dissertation, Sudan University for Science and Technology, Khortoum, Sudan.
- Al-Raggad M (2006). The vocational education and training and the preparation of the human resources: the status quo of Vocational Education and Training in Jordan. The Arab Forum for Human Resource Management. Retrieved on May the 1st 2016 from: <http://www.hrdiscussion.com/hr30601.html>
- Al-Sa'aideh M (2010). A Rationale to adopt team teaching in PVE in Jordan. *J. Instructional Psychol.* 37(4): 269-285.
- Al-Sa'aideh M (2011). Necessity of Difference of the Prevocational Education Curriculum Content According to the Students' Gender: Perceptions of students and Teachers. *Dirasat: Educ. Sci.* 38(1):25-44.
- Al-Sa'aideh M (2013). An Evaluative Study for the status quo of pre-vocational education and suggestions for enhancement in the higher basic stage in Jordan. *Dirasat: University of Ammar Thlajji, Algeria*, 27:11-35.
- Al-Sa'aideh M, Al-Zyoud M (2009). Reasons behind Students Negative Attitudes towards Credit Courses at the University of Jordan. *Dirasat: Educ. Sci.* 36(supplement):159-172.
- Al-Sa'aideh M, Al-Zyoud M (2015). Benefits of teaching interdisciplinary subjects collaboratively in Jordanian PVE. *Educ. Res. Rev.* 10(20):2702-2712.
- Al-Sabaibah A (1998). Attitudes of the tenth grade students towards vocational education, and its relationship to some variables. Unpublished M.Sc Thesis, Al-Yarmouk University, Irbid, Jordan.
- Alsaydeh M (2002). Prevocational education in Jordan: Implications for teacher preparation and in-service training. Unpublished Ph.d Dissertation, the University of Huddersfield, UK.
- Al-Sayyed M (2009). Vocational Education: Its concepts and strategies for instruction and assessment. Amman, Jordan: Dar Wa'el for Publishing
- Al-Shawaqfah B (1991). Attitudes of the Jordanian Community towards crafts education Unpublished M.Ed Thesis, The University of Jordan, Amman, Jordan.
- Al-Syouf M (2007). The degree of focus of the industrial education curricula on the careers' requirements and the level of Graduates' acquisition of these requirements. Unpublished Ph.D. Dissertation, University of Jordan, Amman, Jordan.
- Al-Tarawneh KH (2002). Problems that face Vocational Education at Al-Karak Governorate as perceived by principals and teachers. *Journal of King Abdel-Aziz University: Educ. Sci.* (13):77-118.
- Al-Tarawneh N (2000). Factors that affect the 10th basic grade students to enroll Vocational Education at public schools affiliated to Al-Karak Educational Directorate. Unpublished M.Ed. thesis, Mu'tah University, Jordan.
- Al-Tweissi A (2011). Basics of Pre-Vocational Education. 2nd Edition, Amman: Dar Al-Shorouq for Publishing and Distribution.
- Al-Tweissi A (2013). The Nature of Solutions Proposed to Promote the Social Image of VE from the Point of View of Experts in Jordan. *Dirasat Educ. Sci.* 40(2):1493-1510.
- Amir T, Gati I (2006). Facets of career decision-making difficulties. *Bri. J. Guidance Counsell.* 34:483-503.
- Arab League Educational, Cultural and Scientific Organization (ALECSO). (1998). The Meeting between Officials of the Secondary VE and Officials of Manpower Planning about Modernizing Programs of the General, Vocational Secondary Education, their Integration, and Linking to the Needs of Development in Arab and Some Foreign Countries. Al-Riyadh, Kingdom of Saudi Arabia.
- Atwan A (2001). Introduction to vocational training. Trainers' training Institute, Ramallah, Palestine.
- Chammas A (2010). Promoting the Social Image of TVET in Mashreq Countries. Beirut: Conference Report (GTZ Publications).
- Cheung C, Dimple R (2012). The impact of electronic word-of-mouth communications: a literature analysis and integrative model. *Decision Support Systems*, 54(1):461-470. DOI: 10-1177/0042085906293818
- Creed P, Prideaux L, Patton W (2005). Antecedents and consequences

- of career decisional states in adolescence. *J. Vocat. Behav.* 67:397-412.
- Daghlis A (2004). The Situation of the Curriculum Implementation of Pre-vocational Education in the Higher Basic Stage in Jordan. Unpublished Ph.d Dissertation, the University of Jordan, Amman.
- European Training Foundation. (2006). Technical and vocational education and training in Jordan areas for development cooperation. Retrieved on May the 1st from [http://www.etf.europa.eu/pubmgmt.nsf/\(getAttachment\)/ACE62B7AC28F6695C1257218005884B3/\\$File/NOTE6V4LW5.pdf](http://www.etf.europa.eu/pubmgmt.nsf/(getAttachment)/ACE62B7AC28F6695C1257218005884B3/$File/NOTE6V4LW5.pdf)
- Freihat G (2000). Management and educational planning. 1st ed. The New Co. for Printing, Jordan
- Galliot L, Graham L, Naomi S (2015). Who struggles most in making a career choice and why? Findings from a cross-sectional survey of Australian high school students. *J. Psychol. Counsellors Schools* 25(2):133-151. DOI: 10.1017/jgc.2015.7
- Grubb W, Lazerson M (2004). The education gospel and the vocational transformation of schooling (Boston, MA, Harvard University Press).
- Hayward G (2004). Foreword: A century of vocationalism. University of Oxford, UK. Retrieved on March 20, 2016 from www.jstor.org/stable/pdf/4127149.pdf
- Hayward G, James S (Eds) (2004). Balancing the skills equation: key issues for policy and practice (Bristol, Policy Press).
- Helwig A (2008). From childhood to adulthood: A 15-year longitudinal career development study. *Career Dev. Q.* 57:38-50.
- Israel GD, Lionel JB, Hartless G (2001). The influence of family and community social capital on educational achievement. *Rural Sociol.* 66(1):43-68.
- Jeynes W (2007). The relationship between parental involvement and urban secondary school student academic achievement: A Meta-analysis. *Urban Educ.* 42(1):82-110.
- Keating J, Savage G, Polesel J (2012). Letting schools off the hook? Exploring the role of Australian secondary schools in the COAG Year 12 attainment agenda. *J. Educ. Policy.* 28:268-286. doi:10.1080/02680939.2012.730628
- Lamb S, McKenzie P (2001). Patterns of success and failure in the transition from school to work in Australia (Longitudinal Surveys of Australian Youth Research Report 18). Melbourne, Australia: Australian Council for Educational Research.
- Lent R, Brown S, Hackett G (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *J. Counsel. Psychol.* 47:36-49.
- Liao C, Ji C (2015). The origin of major choice, academic commitment, and career-decision readiness among Taiwanese college students. *Career Devel. Q.* 63:156-170. DOI: 10.1002/cdq.12011
- Liu J, McMahon M, Watson M (2014). Children career development in mainland China: A research and practice agenda. *Career Devel. Q.* 62:268-279.
- Luke A, Graham L, Sanderson D, Voncina V, Weir K (2006). Curriculum and equity: A review of the international research. Adelaide, Australia: Department of Education and Community Services.
- MacAskill W (2014). Replaceability, career choice, and making a difference. *Ethical Theory Moral Practice*, 17(2):269-283.
- Marks G (2010). School sector and socioeconomic inequalities in university entrance in Australia: The role of the stratified curriculum. *Educational Research and Evaluation: Int. J. Theory Pract.* 16:23-37.
- McMahon M, Watson M (2008). Children career development: Status quo and future directions. *Career Dev. Q.* 57(1):4-6.
- McMillan J, Marks G (2003). School leavers in Australia: Profiles and pathways (Longitudinal Surveys of Australian Youth Research Report 31). Melbourne, Australia: Australian Council for Educational Research.
- Mdanat S, Naser I (1982). The effect of the economic and social factors and the level of education of the father and the student achievement on the attitudes of the third preparatory male students towards vocational education. *Dirasat Educ. Sci.* 21(2):65-75.
- Minhua L (2015). Bad students go to vocational schools! Education, social reproduction and migrant youth in urban China. *Chinan J.* 73:108-131. DOI: 10.1086/679271
- Moodie G, Wheelahan L (2009). The significance of Australian vocational education institutions in opening access to higher education. *Higher Educ. Q.* 63(4):356-370. DOI: 10.1111/j.1468-2273.2009.00438.x.
- Mrayyan N (2010). Employing Youth: Reality and Challenges. The National Center for Human Resources Development, Amman, Jordan.
- Ministry of Labour (2012). Enhancing the community image of vocational education and employment sector: the strategy of communication. Retrieved on March 29, 2016 from <http://mol.gov.jo/Pages/Strategic.aspx>
- Nasrallah A (1998). Harmonization between the Outcomes of Technical Education and Training with the Needs of the Labour Market in Jordan and Tunisia. Arab Center for Vocational Training and Trainers Preparation.
- National for Employment and Training (NET) (2001). The Objectives. Retrieved from: <http://net.mil.jo/objectives> on 15th July 2015.
- New South Wales Government Education and Communities. (2014, September 10). The new school leaving age: A guide for parents. Retrieved March 2, 2015 from Retrieved on March 27, 2016 From <http://www.schools.nsw.edu.au/leavingsschool/schoolleaving/investingfuture.php>.
- Okorosaye-Orubite A (2008). Universal basic education and sustainable development. A paper presented at Bayelsa State education stakeholders conference, 2nd- 4th December 2008 at Glory land Cultural Centre, Yanegoa.
- Porfeli E, Hartung P, Wandracek F (2008). Children vocational development: A research rationale. *Career Dev. Q.* 57:25-37.
- Porfeli E, Lee B (2012). Career development during childhood and adolescence. *New Dir Youth Dev.* 134:11-22.
- Pink B (2013). Socio-Economic Indexes for Areas (SEIFA) 2011. Canberra, Australia: Australian Bureau of Statistics.
- Psacharopoulos, G (1997). National Programmes in Technical and VE: economic and education relationship. *J. Vocat. Educ. Train.* 49(3):351-366.
- Rossetti R (1990). An examination of factors influencing students not to enroll in secondary Vocational Education. Ohio State University, Department of Agricultural Education, Columbus, USA
- Sikora J, Saha L (2009). Gender and professional career plans of high school students in comparative perspective. *Educational Research and Evaluation: Int. J. Theory Pract.* 15:385-403.
- Sikora J, Saha L (2011). Lost talent? The occupational ambitions and attainments of young Australians (Longitudinal Surveys of Australian Youth). Adelaide, Australia: National Centre for Vocational Education Research.
- The United Nations Program and Mohammed Bin Rashed Foundation (2012). The Arab knowledge report for the year 2010/2011. Preparing youth generations for knowledge. Dubai: Al- Ghair for Printing and Publishing.
- Tomlinson S (2012). The irresistible rise of the SEN industry. *Oxford Rev. Educ.* 38:267-286.
- Tweisat A (1998). The Effectiveness and Efficiency of Jordanian Pre-vocational Education Provision. Unpublished Ph.D Thesis, University of Huddersfield, England.
- UNESCO- UNEVOC (2012). World TVET Database -Country Profiles – Jordan. Retrieved on May the 1st from: <http://www.unevoc.unesco.org/go.php?q=World+TVET+Database>
- Unterhalter E (2003). The capabilities approach and gendered education: An examination of South African complexities. *Theory and Research in Education*, 1, 7-22. DOI:10.1177/1477878503001001002
- Walker M (2005). Amartya Sen's capability approach and education. *Educ. Action Res.* 13:103-110. DOI:10.1080/09650790500200279
- Watkins M, Noble G (2008). Cultural practices and learning: Diversity, discipline and dispositions in schooling. Sydney, Australia: University of Western Sydney and NSW Department of Education and Training.
- Watson M, McMahon M (2008). Children career development: metaphorical images of theory, research, and practice. *Career Dev. Q.* 57:75-84.
- Watson M, McMahon M, Longe P (2011). Occupational interests and

- aspirations of rural black South-African children: Considerations for theory. *J. Psychol. Afr.* 21(3):413-420.
- Wilson S (2011). Direct and indirect effects of social class on career expectations and likelihood of compromise in an adolescent sample (Unpublished doctoral thesis). University of Northern Colorado, CO.
- Yawkey T, Arnion E (2001). Fostering relevance with career education in the elementary school. *Career Educ.* 95(1):44-50.
- Yusuf S (2012). First Secondary Academic Education Students' Avoidance of Vocational Education in Jordan and the Role of school Principals in encouraging them towards it. Unpublished Ph.D. Dissertation, Yarmouk University, Irbid, Jordan.



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