INVESTIGATION OF THE VARIABLES PREDICTING LEADERSHIP STYLES OF SCHOOL PRINCIPALS

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Investigation of the Variables Predicting Leadership Styles of School Principals

Sukru CANKAYA¹, Oguz SERIN²

Abstract

The aim of this study is to compare the leadership styles of School Principals working in primary and secondary education institutions in TRNC in terms of gender variable and to determine the contribution of their personality traits, problem solving skills, critical thinking skills, and their attitudes towards inclusion in special education in predicting leadership styles. The sample of the study consists of a total of 76 school principals, 39.5% (n=30) female and 60.5% (n=46) male, determined by the quota sampling method. Data of the research were collected with Problem Solving Inventory (PSI), Leadership Inventory, Critical Thinking Scale, and The Scale of the Attitude towards the inclusion in special education. Data were analysed with t-test and Multiple Regression Analysis. Significance level has been accepted as .05 in this research. In this research, it was found that there is no significant difference in attitudes of the School Principals towards inclusion in special education, their Problem-Solving Inventories (PSI), Leadership Inventories, and Critical Thinking Scales according to the gender variable. As a result of the research, it was determined that the predictor variables such as, critical thinking skills, problem solving skills, and their attitudes towards inclusion in special education do not significantly predict the leadership styles but Laissez-faire Leadership style, Management by Expectations, Management by Exceptions, Charisma, Intellectual Stimulation and variables predicting personal support were determined to predict the school principals’ leadership styles significantly.

Keywords: leadership, problem solving, critical thinking, school principals, social inclusion, positive school environment.

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INTRODUCTION

School is an organization consisting of school principals, teachers, students and power. School principals have a certain power supply at school (Asan & Aydin, 2006; Simsek, 2003; Basaran, 2008). The concept of power supply owned by the school principal expresses what the school principal’s current power base is based on (Bayrak, 2001; Ira & Bulut, 2018).

According to Bryk and Schneider (2002), in order to create a sustainable trust environment at school, the employees working at school must have the competence to do the profession, there must be honesty, lucidity in relationships and there must be transparency between the principal and the employees. To ensure this positive school environment, school principals are expected to have advanced critical thinking and problem solving skills and be able to make right decisions, create a positive atmosphere based on trust at school, support the managers and teachers, who contribute to the success of the institution, know the laws and regulations of all educational fields for the success of institution (Sisman, 2012).

In the laws and regulations regarding special education, it has been defined that individuals in need of special education can be given service by both private and state institutions. Training of individuals in need of special education together with their peers without any disabilities in regular classrooms and branch teachers is called co-education (MEB, 2012). School principals are expected to have an attitude that knows the personal rights of employees and takes care of them to prevent them from incur losses (Ozsøy, Ozyurek, & Eripek, 2001). Inclusion is the education of the student with disabilities by providing the required support and special education services as full or part-time education in regular classes with the least restrictive educational environment for him/her (Kircaalli-Iftar, 1992).

Inclusion, which is the training of the students in need of special education and the students with no disabilities together in a single education program, is a necessity in education and it has been emphasized in all opinions and education programs in recent years (Abbasoglu, 2016). The aim of the inclusive education is expressed as facilitating the child in need of special education to live in the society and to provide an education opportunity to meet his/her social and emotional needs by integrating students both academically and socially (Sucuoglu & Ozokçu, 2005).

Management process is defined as a problem-solving process and the duty of a manager is to solve problems (Guçlü, 2003). Managers are expected to have the ability to use the resources of the school efficiently, to be consistent in school-environment relations, to increase student success, deal with crisis situations in the organization, manage conflicts, have vision, motivate the staff, make reliable decisions and solve problems (Çelikten, 2001). According to Kuçukahmet (2002), the elements that provide and direct the development of education are the driving forces. With this understanding, it is very difficult to think of a problem-free education. Principals have to have a certain competence in this sense. According to
Hoy and Miksel (1987), problem solving is the main responsibility of all principals. All school principals must understand the importance of the problem-solving process very well because school management is basically a problem-solving process. School principals can only be successful as long as they can make effective and objective decisions. It is required for principals to choose from many different options to produce the best solution in any cases so they must have advanced problem-solving skills (Guçlu, 2003). In modern perspective, the principal is also perceived as a ‘problem solver’. From this point of view, management can be said to be a problem-solving art. The most strategical part of education system and school management is the principal of the school. In the related literature, there are some studies related to problem solving skills of school principals (Koçak & Eves, 2010; Ada et al., 2010; Iskender, Yaman & Akbayrak, 2004; Akça & Yaman, 2009; Guçlu, 2000.

Critical thinking has become the basic skill in all occupational groups. Critical thinking is not an option that can be used in teaching process, but an inseparable part of education because critical thinking is a necessary condition to be considered as an educated person (Norris, 1985). For a very long time, it has been accepted by educators that critical thinking is an important and required product of education. One of the important concepts describing critical thinking is individual and free thinking (Sakar, 2016). The critical thinker does not passively accept the thoughts and opinions of others, on the contrary, independently create his/her own opinion by analysing the thoughts and opinions of others. This independence, liberalizes mind, heart and actions of a person (Doganay & Unal, 2006). Ennis (1989), who has many studies on critical thinking, recalls the concept of critical thinking as a reasonable and reflective thinking when deciding on what the individual does or believes (Arslantas & Kurnaz, 2015).

When different explanations and approaches are considered regarding critical thinking, it is possible to find some common points. Firstly, critical thinking is a complicated and integrated thinking process, which covers information, strategy, skills, and attitudes (Doganay & Unal, 2006). Within the scope of 2071 targets of Turkey, intellectuals that will be educated are expected to be creative, reflective, and have very advanced critical thinking, problem solving and decision making skills. It has become a necessity for all people having professions to be equipped with high-level skills to produce information and technologies and to compete with their colleagues at an international level (Arslantas & Kurnaz, 2015).

Most of the theses written in Turkey regarding critical thinking were about university and primary education students. As occupational groups, teachers and nurses are prominent as participants in most of the theses (Arslantas & Kurnaz, 2015). There are few studies carried out with school principals in the field of education management. The relationship between school principals’ critical thinking tendencies and their decision making strategies (Tuncer, 2015); The relationship between classroom teachers’ critical thinking tendencies and their classroom management competency perceptions (Guner & Sucuoglu, 2010);
The pattern of explanatory relationship between constructivist characteristics of classroom teachers and their creative thinking, problem solving skills, and critical thinking tendencies (Turan, 2010); Critical thinking in education (Kazanci, 1989); As it can be seen, there are very few studies addressing the critical thinking skills of school principals.

Concepts of leadership and leader are among the most researched concepts throughout the history. The reason is that, these concepts appear in every aspect of our lives (Avci, 2015). According to Baltas (2012), a leader is someone, who serves as a model with his/her values, moral sentiment, wording, and behavioural style. A leader offers a model for the successors to identify with. Increase in demand for the change and development in educational organizations has led to increase in the attention for the concept of leadership at schools (Keith, 2009). According to Kotter, leadership and management varies by the principles of management process. Management principles of a “manager” are classified as organizing and pricing, organization and employees, control and problem solving, while the management principles of a “leader” are classified as determining the principles ensuring the operation of an organization, ensuring the participation of the employees in the decision-making process, and the motivation of the employees for common purposes (Nelson & Quick, 2005). Leader behaviours play a decisive role in shaping the organizational culture (Buluç, 2013; Schein, 2010).

In this sense, when the related literature has been reviewed, no study has been found aiming to determine the contributions of school principals’ and vice principals’—working in primary and secondary education institutions affiliated to the Ministry of Education in TRNC—attitudes towards inclusion in special education, critical thinking skills, and problem solving skills in predicting their leadership styles. In this respect, results of this research are expected to make new contributions to the field.

**Methodology**

**Aim of the Study**

The aim of this study is to compare the leadership styles of the school principals working in primary and secondary education institutions in TRNC in terms of gender variable and to determine the contributions of their Laissez-Faire leadership style, Management by Expectations, Management by Exceptions, Charisma, Intellectual Stimulation and Personal Support characteristics, problem solving skills, critical thinking skills, and attitudes towards the inclusion in special education to predict their leadership styles (Yilmaz & Saracaloglu, 2017). In order to achieve this goal, answers have been sought to the questions below:

How much of the leadership styles of principals can be predicted by their Laissez-Faire leadership style, Management by Expectations, Management by Exceptions,
Charisma, Intellectual Stimulation and Personal Support characteristics, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education?

Within the scope of this general aim, answers have been sought to the questions below: (1) Do the Laissez-Faire leadership style, Management by Expectations, Management by Exceptions, Charisma, Intellectual Stimulation and Personal Support characteristics, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education of school principals show a significant difference by the gender variable?; (2) How much of the leadership styles of the school principals working in primary and secondary education institutions in TRNC are predicted by their Laissez-Faire leadership style, Management by Expectations, Management by Exceptions, Charisma, Intellectual Stimulation and personal support characteristics, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education?

Research Design

The present study is a descriptive research and the relational screening model was used. In accordance with this model, the existence and degree of the relationships between dependent and independent variables were tried to be revealed (Crano & Brewer, 2002). The power of Laissez-Faire leadership style, Management by Expectations, Management by Exceptions, Charisma, Intellectual Stimulation and personal support characteristics, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education in predicting the leadership styles of the school principals working in primary and secondary education institutions in TRNC was researched.

Population and Sample

The population of the research is made up of principals and vice principals working in education institutions affiliated to the Ministry of Education in TRNC. A total of 76 school principals, including 30 female (39.5%) and 46 male (60.5%) were determined for the sample of the study from the universe by using the quota sampling method.

Research Instruments

Leadership Inventory: It was developed by Avolio and Bass (1988) and validity and reliability study of its Turkish form was made by Korkmaz (2005). Reliability level of the Turkish form of the scale was found to be 0.88. The scale consisted of 5 factors: It is interpreted as the person who has a high score from which factor, he/she has that leadership feature in that factor.
**Scale for Critical Thinking Skills:** As a data collection instrument developed by Yoldas (2018), Cronbach’s alpha reliability coefficient of .87 with “Critical Thinking Skills Scale” was developed by the researcher and the “Personal Data Form” was used. The range score of the scale is between 42 and 210. The average scores for the critical thinking skills scale are as follows: low scores ($\bar{x} = 42–98$), moderate ($\bar{x} = 99–154$), and high ($\bar{x} = 155–210$) defined as a 3-point range. Higher scores indicate positive critical thinking skills; lower scores indicate negative critical thinking skills.

**Problem Solving Inventory (PSI):** It was originally developed by Heppner and Petersen (1982), adapted into Turkish by Sahin, Sahin and Heppner (1993). The data were collected by using the Problem-Solving Inventory and its validity and reliability studies were conducted. The scale’s coefficient of Cronbach Alpha internal consistency was found to be .90 but it was determined as .87 for this study.

**Attitude Towards the Inclusion in Special Education (OEYT).** The Scale of the Attitude Towards the Inclusion in Special Education, which was developed by Ozbaba (2000) was used in this study. It is 5-Likert type scale that consists of 30 items. The scale’s coefficient of Cronbach Alpha reliability was calculated as .86.

**Data Analysis**

In statistical analysis of the research data, in order to determine the important predictors of leadership styles of the school principals, “Multiple Regression Analysis” techniques were used. Analysis of the data was carried out in computer environment by using the SPSS package program. The significance level of this research was accepted as .05.

**Results**

In this section, the relationship between the problem-solving skills, critical thinking skills, leadership styles of school principals and their attitudes towards the inclusion in special education were discussed. The power of personality traits, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education on prediction of the leadership styles of the school principals working in primary and secondary education institutions in TRNC were investigated.

In the research, leadership styles, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education of the school principals working in primary and secondary education institutions in TRNC were examined by the gender variable. The average points by the gender independent variable, standard deviations and $t$ values were given in *Table 1*. 

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Table 1. The mean scores, standard deviations, and t values of the school principals’ leadership styles, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education by the gender independent variable

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Gender</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>Level of importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>leadership</td>
<td>F</td>
<td>30</td>
<td>132.46</td>
<td>14.79453</td>
<td>74</td>
<td>.097</td>
<td>.923</td>
<td>p&gt;.05</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>46</td>
<td>132.84</td>
<td>17.76509</td>
<td>74</td>
<td>.771</td>
<td>.443</td>
<td>p&gt;.05</td>
</tr>
<tr>
<td>PSI</td>
<td>F</td>
<td>30</td>
<td>76.03</td>
<td>19.32746</td>
<td>74</td>
<td>1.23</td>
<td>.224</td>
<td>p&gt;.05</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>46</td>
<td>79.50</td>
<td>19.05402</td>
<td>74</td>
<td>1.23</td>
<td>.224</td>
<td>p&gt;.05</td>
</tr>
<tr>
<td>CTS</td>
<td>F</td>
<td>30</td>
<td>89.26</td>
<td>17.74714</td>
<td>74</td>
<td>2.038</td>
<td>.045</td>
<td>p&lt;.05*</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>46</td>
<td>98.19</td>
<td>19.24649</td>
<td>74</td>
<td>2.038</td>
<td>.045</td>
<td>p&lt;.05*</td>
</tr>
<tr>
<td>OEYT</td>
<td>F</td>
<td>30</td>
<td>111.90</td>
<td>15.10960</td>
<td>74</td>
<td>.247</td>
<td>.805</td>
<td>p&gt;.05</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>46</td>
<td>112.91</td>
<td>18.83121</td>
<td>74</td>
<td>.247</td>
<td>.805</td>
<td>p&gt;.05</td>
</tr>
</tbody>
</table>

Note: PSI: Problem Solving Inventory; CTS: Critical Thinking Skill; OEYT: The Scale of the Attitude towards the Inclusion in Special Education

In Table 1, it was examined with t-test whether the school principals’ leadership styles, problem solving skills, critical thinking skills and the attitude towards the inclusion in special education differentiate or not by the gender independent variable. It was determined that leadership styles, attitudes towards the inclusion in special education and problem-solving skills do not significantly differentiate by the gender independent variable; It was revealed that critical thinking skills significantly differentiate in favour of male school principals.

Correlations of the scores that the school principals got from the attitude scales of Laissez Faire leadership style, Management by Expectations, Management by Exceptions, Charisma, Intellectual Stimulation and personal support, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education were given in Table 2. It was determined in the analyses that the scattering diagram created for the standardized residual values and the standardized predictor values define a linear relationship and the points tend to accumulate around an axis.

In Table 2, there are the arithmetic means, standard deviation and correlation values related to the predictor variables to be analysed (laissez-faire leadership style, management by expectations, management by exceptions, charisma, intellectual stimulation and personal support, problem solving skills, critical thinking skills, attitudes towards the inclusion in special education) before the regression analysis. From scattering diagrams based on the partial relationships of predictor variables with leadership styles, and when Table 2 analysed, it can be seen that there is a linear and positive relationship between leadership styles and problem-solving skills and critical thinking skills.
Table 2. Pearson Product-Moment Correlation Coefficient Results regarding the leadership styles, problem solving, critical thinking, and attitudes towards the inclusion in special education of the school principals

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Mean</th>
<th>Std.Dev.</th>
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<tbody>
<tr>
<td>Laissez-Faire leadership style (1)</td>
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<td></td>
<td>10.921</td>
<td>2.822</td>
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<td>Pearson Correlation</td>
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<td>Sig. (2-tailed)</td>
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<td>Management by Expectations (active) (2)</td>
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<tr>
<td>Pearson Correlation</td>
<td>.487**</td>
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<td>Sig. (2-tailed)</td>
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<tr>
<td>N</td>
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<td>Management by Exceptions (passive) (3)</td>
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<tr>
<td>Pearson Correlation</td>
<td>.476**</td>
<td>.306**</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.007</td>
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<td>N</td>
<td>76</td>
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<td>Charisma (4)</td>
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<td>63.750</td>
<td>8.698</td>
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<tr>
<td>Pearson Correlation</td>
<td>.010</td>
<td>.142</td>
<td>.351**</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.931</td>
<td>.222</td>
<td>.002</td>
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<tr>
<td>N</td>
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<tr>
<td>Intellectual stimulation and personal support (5)</td>
<td></td>
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<td></td>
<td>27.973</td>
<td>4.095</td>
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<tr>
<td>Pearson Correlation</td>
<td>.011</td>
<td>.131</td>
<td>.304**</td>
<td>.866**</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.922</td>
<td>.260</td>
<td>.007</td>
<td>.000</td>
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<td>N</td>
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<tr>
<td>Problem Solving Skill (6)</td>
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<td></td>
<td>78.131</td>
<td>19.109</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.405**</td>
<td>.210</td>
<td>.062</td>
<td>.479**</td>
<td>.366**</td>
<td></td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.069</td>
<td>.595</td>
<td>.000</td>
<td>.001</td>
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<td></td>
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<tr>
<td>N</td>
<td>76</td>
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<td>76</td>
<td>76</td>
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<tr>
<td>Critical Thinking Skill (7)</td>
<td>Pearson Correlation</td>
<td>.428**</td>
<td>.227*</td>
<td>.205</td>
<td>.297**</td>
<td>.305**</td>
<td>.715**</td>
<td>-</td>
<td>94.671</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.048</td>
<td>.075</td>
<td>.009</td>
<td>.007</td>
<td>.000</td>
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<tr>
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<td>76</td>
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<tr>
<td>The Scale of the Attitude towards the Inclusion in Special Education (8)</td>
<td>Pearson Correlation</td>
<td>.025</td>
<td>.428**</td>
<td>.227*</td>
<td>.205</td>
<td>-.297**</td>
<td>-.305**</td>
<td>.715**</td>
<td>112.513</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.830</td>
<td>.000</td>
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<td>N</td>
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</tbody>
</table>

*Note:* ** Correlation is significant at the .01 level (2-tailed). * Correlation is significant at the .05 level (2-tailed).
When Table 2 is analysed, it is seen that the correlation values of the dependent variables with each other are not high enough to cause multicollinearity problem. In multiple regression analysis application, it was observed that there is a linear relationship between the predictor variables (laissez-faire leadership style, management by expectations, management by exceptions, charisma, problem solving skills, critical thinking skills, attitudes towards the inclusion in special education) and the leadership styles and the scores have a normal distribution. Multiple regression analysis results related the variables considered as the leadership predictors such as, laissez-faire leadership style, management by expectations, management by exceptions, intellectual stimulation and personal support, problem solving skills, critical thinking skills, and attitudes towards the inclusion in special education are given in Table 3.

Table 3. The variables that predict the leadership levels according to multiple linear regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Zero-order</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-1.393</td>
<td>1.853</td>
<td>-1.752</td>
<td>.455</td>
<td></td>
</tr>
<tr>
<td>Laissez-faire leadership style</td>
<td>1.106</td>
<td>.075</td>
<td>.189</td>
<td>14.828</td>
<td>.000</td>
</tr>
<tr>
<td>Management by expectations</td>
<td>.990</td>
<td>.069</td>
<td>.158</td>
<td>14.421</td>
<td>.000</td>
</tr>
<tr>
<td>Management by exceptions</td>
<td>1.286</td>
<td>.091</td>
<td>.166</td>
<td>14.140</td>
<td>.000</td>
</tr>
<tr>
<td>Charisma</td>
<td>1.124</td>
<td>.040</td>
<td>.591</td>
<td>27.872</td>
<td>.000</td>
</tr>
<tr>
<td>Intellectual Stimulation and Personal Support</td>
<td>1.087</td>
<td>.078</td>
<td>.269</td>
<td>13.878</td>
<td>.000</td>
</tr>
<tr>
<td>PSI total</td>
<td>.010</td>
<td>.014</td>
<td>.011</td>
<td>.721</td>
<td>.473</td>
</tr>
<tr>
<td>CTS</td>
<td>-.014</td>
<td>.012</td>
<td>-.017</td>
<td>-1.168</td>
<td>.247</td>
</tr>
<tr>
<td>OETY</td>
<td>.004</td>
<td>.009</td>
<td>.005</td>
<td>.491</td>
<td>.625</td>
</tr>
</tbody>
</table>

Note: Predictors: Laissez-faire leadership style, Management by Expectations, Management by Exceptions, Charisma, Problem Solving Skills, Critical Thinking Skills, Attitudes towards the Inclusion in Special Education
Dependent Variable: Leadership Style
When Table 3 and the bilateral and partial correlation between the predictor variables (Laissez-faire leadership, Management by expectations, Management by exceptions, Charisma, Intellectual Stimulation and Personal Support, Problem Solving Skills, Critical Thinking Skills, attitudes towards the inclusion in Special Education) and the dependent variable (Leadership) is examined, it is seen that, there is a positive significant relationship ($r = -.35$) between the Laissez-faire leadership and leadership but when others variables are examined, it is seen that the correlation between these two variables is $r = -.87$. There is a positive ($r=.42$) significant relationship between management by expectations and leadership. However, when the other six variables are examined, it is seen that this correlation was calculated as $r=.87$. It is seen that there is a positive significant relationship ($r=.59$) between Management by Exceptions and leadership. However, when the other variables are examined, the correlation between these two variables is seem to be $r=.86$. It is seen that there is a positive significant relationship ($r=.91$) between Charisma and leadership. However, when the other variables are examined, the correlation between these two variables is seem to be $r=.96$. It is seen that there is a positive significant relationship ($r=.85$) between Intellectual Stimulation and Personal Support and leadership. However, when the other variables are examined, the correlation between these two variables is seem to be $r=.86$. Laissez-faire leadership style, Management by expectations, Management by exceptions, Charisma, Intellectual Stimulation and personal support variables give a significant relationship with the leadership scores of the school principals ($R = .997$, $R^2 = .994$, $p<.001$). Leadership styles of the school principals describe the 99% of the total variance with the six abovementioned variables. According to the standardized regression coefficient ($B$), order of the importance of predictor variables on leadership styles are as follows: Charisma, Intellectual stimulation and personal support, management by exceptions, management by expectations and Laissez-faire leadership style.

When t-test results related the relevance of regression coefficients are examined, it is seen that Charisma, Intellectual stimulation and personal support, management by exceptions, management by expectations and Laissez-faire leadership style variables are significant predictors on leadership. It is possible to say that, problem solving skills, critical thinking skills and attitudes towards the inclusion in special education variables do not have an important effect on leadership prediction.

**Discussion**

When the results of the study are examined all in all, it was revealed that leadership styles, attitudes towards the inclusion in special education and problem-solving skills do not differentiate by the gender independent variable; critical thinking skills significantly differentiate in favour of the male school principals. Yilmaz (2016) examined whether gender significantly predict the
transformational leadership levels of the principals. No significant difference between the transformational leadership average of female principals and the transformational leadership average of male principals were found. As a result of the research conducted by Sirin and Yetim (2009), female principals see themselves more transformational leaders than male principals.

In the study conducted by Gulveren (2007), a significant difference was found in favour of female teacher candidates, and the critical thinking skills of female teacher candidates were found to be higher than the critical thinking skills of male teacher candidates. This differs from the findings of this study. In the research of Karademir (2013) conducted with prospective teachers, did not find a significant difference between the critical thinking skills of female and male teacher candidates when it is examined by the gender. Tufan (2008) and Uluyol (2011) reached the same result as well. When accessing and creating information instead of receiving information has come to the forefront, the necessity for students to have critical, creative, reflective, analytic thinking skills, problem solving and questioning skills have brought forward the research on how thinking and learning takes place (Pekdogan and Bayar, 2016; apud. Yoldas & Merç, 2018).

In multiple regression application, bilateral and partial correlations between predictor variables (Laissez-faire leadership style, management by expectations, management by exceptions, charisma, intellectual stimulation and personal support, problem solving skills, critical thinking skills, and attitudes towards the inclusion in special education) and the dependent variable (Leadership) were examined.

According to these results, there is a positive significant relationship between “Laissez-faire leadership style”, “Management by expectations”, “Management by exceptions” and leadership. It is also seen that there is a positive and high level of significant relationship between Charisma, Intellectual stimulation and personal support and leadership. It is seen that, there is no significant relationship between problem solving skills, critical thinking skills, attitudes towards the inclusion in special education and leadership. Laissez-faire leadership style, Management by expectations, Management by exceptions, Charisma, Intellectual stimulation and personal support variables give a high-level significant relationship with leadership scores of the school principals. Order of the relative importance of the predictor variables on leadership styles are as follows: Charisma, Intellectual stimulation and personal support, Management by exceptions, Management by expectations and Laissez-faire leadership style.

Firstly, the concept of transformational leadership was named by Burns in his work named “world class leaders” in 1978 (Burns, 1978). It was important to reveal the differences between Transactional (transformational) leadership, which is more dependent on tradition and the past, and Transformational (transformational) leader for the future, innovation, change and reform. Laissez-faire leadership style, Management with Expectations, Management with Exceptions, Charisma, Problem Solving Skills, Critical Thinking Skills, Participation in Special Education
Attitudes were important in determining the Leadership Style. Transformational leadership involves activating the leader with an impressive vision, encouraging them to overcome their problems, supporting the adoption of group goals, and participating in individual development activities (Williams & Jung, 2003). Interactional leadership, on the other hand, focuses on the relationships between its followers and itself. The leader defines the roles and duties of his followers and gives his subordinates sufficient confidence to get the job done. The leader gives a positive feedback and rewards to his subordinates who have completed their job. If the subordinates cannot achieve their goal, the leader applies sanctions (Champoux, 1996).

Laissez-faire leadership style, Management with Expectations, Management with Exceptions, Charisma, Problem Solving Skills, Critical Thinking Skills, Participation in Special Education are considered to play a key role in developing effective behaviours for organization managers. Shamir, House and Arthur (1993) stated that the special effect that transformational leaders have on their followers can be observed in their attitudes, perceptions and values. Emotional and social competence are among the personality traits of the transformational leader. Transformational Leadership is more related to the “feeling” personality style than the “thinking” personality style (Roush & Atwater, 1992). Transformational leaders use their leadership skills and emotions, which reflect a positive image and are optimistic to motivate their subordinates (Avolio & Bass, 1988). Without such support, employees feel pessimistic. Employees who lose their enthusiasm for working do not make the same effort in the past, and this affects their performance (Manion, 2000). They stated that managers with innovative and motivating personality characteristics show more transformational leadership characteristics than practitioners or analytical coordinators. The personalities of organization managers affect the managerial behaviours they apply to solve the problems that arise within the organization, and this results in either a transformational leadership style or an interactive leadership style. This situation is clearly seen in the leadership styles of school principals.

Conclusion

The result of this study and the results of the studies in this area have shown that it is important that not only personality traits but also problem-solving tendencies while assigning managers to different positions should be known. Because what makes an organization is directly related to how it is formed and managed by a leader.

As a result of the study, it was observed that variables such as Charisma, Intellectual stimulation and personal support, Management with exceptions, Management with expectations, and Laissez-faire leadership style are important predictors for leadership. The most important feature of the leader is that s/he
has characteristics that will set a precedent for the people in the environment. Employees who follow the leader and adopt him/her as a role model will be more comfortable in the team and will be able to increase the team’s performance. Therefore, the leader will be able to influence and simulate not only the employees but also will be the role model. Since leaders with charismatic characteristics will cause their subordinates to resemble themselves, their high personal qualities, attitudes, knowledge and culture level, their thinking and problem-solving skills will make them impressive, and with the effect of this resemblance, a strong group of team will be formed. Team spirit will be the most important achievement that will bring success because the people who resemble themselves with their leader are responsible for the success or failure of the team. In fact, they will embrace each individual of the team with commitment and loyalty. This will increase the success levels of the team.

As a role model, the leader will not choose to rely solely on instructions and rules to put forward creative ideas or support the proposed creative ideas. On the contrary, the leader is immersive and his team will continue its mission at every stage. On the other hand, starting from the determination that problem solving skills, critical thinking skills, and attitudes towards inclusion in special education do not have a significant effect on leadership prediction for managers, it would be appropriate for the leader not to waste his energy. Instead, Charisma, Intellectual stimulation and personal support, Management with exceptions, Management with expectations, and a focus on activities that develop the Laissez-faire leadership style are essential for adoption and team success.

It is seen that Charisma, Intellectual stimulation and personal support, Management by exceptions, Management by expectations and Laissez-faire leadership style variables are significant predictors on leadership. Leaders with charismatic features can lead their subordinates to look like themselves. High personal qualities, attitudes, knowledge and culture level, thinking and problem-solving skills of a leader can make him/her impressive and be a modelled person (Dogan & Aslan, 2001, Yilmaz, 2016). It can be described as relatively more difficult for managers, who prefer to stick only to instructions and rules to come up with creative ideas or support the creative ideas put forward. It can be said that, problem solving skills, critical thinking skills, attitudes towards the inclusion in special education have no significant effect on leadership prediction.

Limitations

It should be accepted that this research has some limitations. When the results of the study conducted with the leadership styles of school principals working in primary and secondary education institutions in TRNC are reviewed, it may be more appropriate to carry out quantitative and qualitative studies with larger and heterogeneous working groups for the future studies. However, it is seen that studies related the relationship between the leadership styles of school principals
and critical thinking, problem solving and inclusion of education is very new and limited. The results of this study are thought to make important contributions to the field in revealing the variables affecting the effective leadership styles in school principals.

**Recommendations**

School principals can be motivated to demonstrate their democratic leadership behaviour. In-service Training, seminars, courses, etc. for school principals can be applied to demonstrate and improve contemporary leadership styles. Competencies can be increased with such and similar activities. Comprehensive and general judgments can be reached by carrying out this study at different levels and in different implementations. The opinions of other internal and external stakeholders of the education about the leadership styles and behaviours of school principals can be compared. School administrators can be encouraged to highlight their transformational and interactive leadership styles. Also, why school principals prefer liberal leadership styles can be explored and investigated. The reason that school principals show their democratic leadership styles less than other leadership styles can be determined to improve the workplace with better teams.

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