Examining the Relationship Between Teachers’ Patience Levels and Professional Resilience

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The purpose of this research is to examine the relationship between teachers’ patience levels and their professional resilience. In this research, which was designed in a relational survey model, the “Teacher Patience Scale” developed by Meriç and Erdem (2022) and the “Teacher Professional Resilience Scale” developed by Näswall, Malinen, Kuntz, and Hodliffe (2019) and adapted into Turkish by Limon (2022) were used as data collection tools. The sample of the research consists of 404 teachers working in public schools in the Kartal and Tuzla districts of Istanbul. According to the research findings, it was found that the teachers’ patience levels and professional resilience levels were high. In addition, while the patience and professional resilience levels of teachers do not show a statistically significant difference according to the gender of the teachers, their educational status, and the number of teachers working in their schools, they show statistically significant differences according to their professional seniority and educational levels. These differences are in favor of teachers working in primary and secondary schools and teachers with lower seniority. According to another finding obtained from the research, there is a positive, high, and significant relationship between teachers' patience levels and their professional resilience levels. As a result of the regression analysis, it was seen that teacher patience was a significant predictor of professional resilience. Teacher patience explains 73% of professional resilience.

Keywords
Teacher, Patience, Resilience

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Introduction

Teachers are one of the most important parts of the education process. Some personal and professional characteristics of teachers enable them to fulfill their profession successfully and to be role models for their students in the desired direction. Professional resilience and patience are some of the positive characteristics that teachers should possess. Patience is the ability to remain emotionally calm and behaviorally wait for undesirable events that people encounter in the course of life (Schnitker, 2012). Patience, a word borrowed into Turkish from Arabic, means self-restraint and self-control (Doğan, 2016). Patience is not a one-dimensional concept and can be seen both as a tendency and as a state. Individuals can be considered as patient people in general or they can show patience against some negative situations experienced in particular (Schnitker, 2012). In other words, patience is the power to endure in the face of sad situations that a person cannot change (Okçu & Pilatin, 2018).

Patience has many positive effects on mental health (Meriç & Erdem, 2022). Patience improves people's flexibility and contributes to their maturation by improving their coping skills (Esen Ateş & Kayıklık, 2019; Sharifi Saki et al., 2018). Thanks to patience, people cope with challenging life events more easily, experience less burnout, and are more successful in maintaining mental health even in the face of negative events (Ateş, 2019; Mahdiyar, Taghavi, & Goodarzi, 2016). Patience does not only refer to the power to endure difficulties, it is defined as not only enduring difficulties but also making efforts in problematic situations and not giving up despite making a lot of effort (Önal, 2008). Patience has been evaluated in the literature in two ways: short-term and long-term. While waiting for an undesirable situation to pass in the face of events experienced in daily life can be considered short-term patience, the patience shown to cope with long-term undesirable life events can be given as an example of long-term patience (Hood et al., 2009). In terms of its functionality, patience is handled in two ways active and passive, and active patience refers to exhibiting various behaviors for the solution of this situation after the acceptance of undesirable situations. In passive patience, on the other hand, there is a stagnant mental process of internalizing and tolerating the problematic situation rather than making an effort to solve it (Özdoğan, 2005). Patience is a virtue that is necessary in all areas of life and being patient in professional life is also very important and contributes positively to people's mental health (Aghababaei & Tabik, 2015; Khormaei et al., 2017). Moreover, patience is inversely related to negative emotional states such as depression and anxiety (Neff, 2003). People may encounter various negativities in their working life. In the face of unwanted experiences, it is very important that the person can manage the process by remaining calm after making all the necessary efforts (Meriç & Erdem, 2022).

As in other professions that require communication with people, patience is very important in fulfilling the profession (Efılti et al., 2021; Gültekin, 2020; Murphy et al., 2004; Üstüner et al., 2021). Teachers may
experience undesirable situations with students, parents, other teachers, or administrators while fulfilling their profession. Teachers need to approach these undesirable situations with patience (Meriç & Erdem, 2022). Therefore, it can be said that patience is one of the characteristics that enable teachers to be successful in fulfilling their profession (Gültekin, 2020). Achieving the desired success outcomes in the teaching profession requires teachers to be patient (Duman & Taş, 2021; Meriç & Erdem, 2023; Shishavan & Sadeghi, 2009). When the literature is examined, it is seen that teachers have been exposed to various negative situations in recent years with the difficulties brought by the teaching profession (Beltman & Mansfield, 2017; Fan et al., 2021). In the face of undesirable situations such as burnout and stress, it is thought that professional resilience is important for teachers to continue their duties in the desired way and to overcome negative professional experiences (Meriç & Erdem, 2023; Smith & Ulvik, 2017). Teachers’ high resilience will make it easier for them to manage the crises they are exposed to in school (Botou et al., 2017).

Resilience is the ability to use coping skills against undesirable situations that occur in one's life, to be successful, and to adapt to changing differences (Oktan, 2012). Resilient individuals have several personal strengths such as certain personality traits and skills (Mansfield et al., 2012; Masten, 2001). Occupational resilience is considered a sub-dimension of psychological resilience (Çetin, 2020). When professional resilience is considered in the teaching profession, it emphasizes the teacher's effort, adaptation, and belief that he/she can successfully perform his/her profession to overcome the difficulties he/she encounters while doing his/her profession (Tagay & Demir, 2016). Resilience includes the teacher's ability to adapt to changing conditions in the face of necessary situations, to show flexibility, to recover quickly after negative experiences, and to maintain a strong structure after the change (Schelvis et al., 2014). In addition, teacher resilience is considered as a personal characteristic in the literature and can be evaluated as a skill that enables teachers to cope with challenging events (Pretsch et al., 2012).

Teachers' high professional resilience positively affects their professional performance (Maddi, 2002). High resilience enables teachers to make efforts to overcome the problems they may experience with colleagues, students, or parents, to have faith that they will be successful in overcoming problems, and to be committed to educational practices (Brunetti, 2006; Daniilidou & Platsidou, 2018). Resilient teachers strive to maintain a successful teaching environment despite all the negative situations they face (Ebersöhn, 2014). In the literature, teacher resilience is considered a multidimensional concept, and teacher resilience contributes positively to the student learning process (Limon, 2022). Studies have examined teacher resilience in various dimensions including motivational, emotional, social, professional resilience, professional success, self-efficacy perception, and optimism (Beltman, 2021; Li et al., 2019; Peixoto et al., 2020). In addition to all these, it has been seen that professional resilience can be developed in the teaching profession (Brunetti, 2006). It has been observed that teachers' having a sense of responsibility, high social skills and problem-solving skills,
professional goals, a sense of humor, a desire for success, expectations, and a high sense of competence can increase their resilience (Bobek, 2002). In another study, it was observed that the climate of the school, services, and opportunities offered to teachers increase their professional resilience (Boldrini et al., 2019). In addition, sustaining the teaching profession with a sense of commitment to a purpose, perceiving the difficulties experienced while practicing the teaching profession as a learning experience, and continuing to be in relationship with other professional shares and students by accepting unchangeable situations also increase teachers' professional resilience (Drew & Sosnowski, 2019). Considering that one of the most important indicators of resilience in the educational process is coping with difficulties encountered in the learning and teaching process and avoiding obstacles (Carr & Claxton, 2002), patience is likely to affect professional resilience.

In the literature, teacher professional resilience is associated with motivation and commitment to the profession (Ellison & Woods, 2020); burnout and stress (Danilidou et al., 2020); teacher self-efficacy (Ellison & Woods, 2020; Razmjoo & Ayooobiyani, 2019); happiness (Altunataş & Genç, 2020); attitude towards teaching profession (Dönmez & Karasulu Kavuncuoğlu, 2019) and professional well-being (Brouskeli et al., 2018) and significant relationships were found. It is thought that patience may be one of these personal characteristics that are examined considering that teachers may be related to professional resilience. Studies have shown that there are positive relationships between psychological resilience, which is related to resilience, and patience (Eliüşük, 2014; Khormaei et al., 2017). In a study, the relationship between teachers' patience level and burnout was examined and a negative relationship was found between patience and burnout (Meriç & Erdem, 2023). In another study, the relationship between physical education teachers' psychological resilience, patience, and happiness levels was examined, and it was found that there was a moderately significant relationship between patience and psychological resilience (Ulukan & Ulukan, 2021). On the other hand, while there are a limited number of studies examining the patience levels of teachers in the literature (Meriç & Erdem, 2022; Meriç & Erdem, 2023; Niyazibeyoğlu & Dağcı, 2023; Türkgeldi, 2019; Ulukan & Ulukan, 2021), no study addressing the relationship between patience and professional resilience of teachers was found. Considering that the personality traits that teachers should have are important for them to successfully continue their profession (Gültekin, 2020), patience can be considered as a trait that will increase teachers' professional resilience. Patience is an important life value (Norling, 2009). Knowing how patience levels are related to teachers' professional resilience can provide preparation for practices in which teachers can increase their patience levels and improve their patience characteristics to increase their professional resilience. In this context, this study aims to contribute to the literature by examining whether teachers' patience and professional resilience levels differ according to demographic variables such as gender, educational status, professional seniority, and the number of teachers in the school.
Based on these, the study aims to examine the relationship between teachers' patience and professional resilience levels. In this context, the sub-objectives of the study are as follows:

1. What are the patience levels of teachers?
2. What are the professional resilience levels of teachers?
3. Do the patience levels of teachers show a significant difference according to their gender, professional seniority, educational level, educational status, and the number of teachers in their schools?
4. Do teachers' professional resilience levels show a significant difference according to their gender, professional seniority, educational level where they work, educational status, and the number of teachers in their schools?
5. Is there a statistically significant relationship between teachers' patience levels and their professional resilience?

**Method**

This study, which examines the relationship between teachers' patience levels and their professional resilience, was designed in the relational survey model, one of the quantitative research models. Survey models are research approaches that aim to describe a past or current situation as it exists (Karasar, 2010).

**Population-Sample**

The population of the study consists of 6443 teachers working in public schools in Kartal (3657) and Tuzla (2786) districts of Istanbul province in the 2022-2023 academic year. Krejcie & Morgan (1970) reported in the sampling table that it is sufficient for the sample to be in the range of 357-370 to represent the universe in the range of 5000-10000 with an error rate of 5%. However, considering the possible data losses, more data were collected. The sample of the study consisted of 404 teachers selected from the population using a simple random sampling method. Personal information of the sample group is presented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>221</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>183</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>404</td>
<td>100</td>
</tr>
<tr>
<td>Educational Status</td>
<td>Associate/Undergraduate Degree</td>
<td>298</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Postgraduate Degree</td>
<td>106</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>404</td>
<td>100</td>
</tr>
<tr>
<td>Professional Seniority</td>
<td>0-10 years</td>
<td>151</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>11-20 years</td>
<td>182</td>
<td>45</td>
</tr>
</tbody>
</table>
### Data Collection Tools

The data collection tool consists of three parts. The first section includes questions to learn the personal information of the participants. The second and third sections include the "Teacher Patience Scale" developed by Meriç and Erdem (2022) and the "Teacher Professional Resilience Scale" developed by Näswall, Malinen, Kuntz, and Hodillife (2019) and adapted into Turkish by Limon (2022).

**Teacher Patience Scale**

The "Teacher Patience Scale" measuring the patience levels of teachers was developed by Meriç and Erdem (2022). Consisting of 11 items and two sub-dimensions (teaching and interaction), the total variance explained by the scale is 46.69%. In addition, the results of the confirmatory factor analysis revealed that the model showed a good fit ($\chi^2$/df = 1.83, p < .05; AGFI = .92, CFI = .95, TLI = .94, RMSEA = .06, SRMR = .05). Croanbach's Alpha ($\alpha$) reliability coefficients for the sub-dimensions of the scale were .80 for the teaching sub-dimension and .70 for interaction. Croanbach's Alpha ($\alpha$) reliability coefficient for the overall scale was .82.

**Teacher Professional Resilience Scale**

The “Teachers’ Professional Resilience Scale” measuring teachers’ professional resilience levels was developed by Näswall, Malinen, Kuntz, and Hodillife (2019) and adapted into Turkish by Limon (2022). Consisting of 9 items and one dimension, the total variance explained by the scale is 54%. The confirmatory factor analysis results revealed that the model showed a good fit ($\chi^2$/df=1.68 p<.05; RMSEA=.07; CFI=.97 and SRMR=.05). Croanbach's Alpha ($\alpha$) reliability coefficient of the scale was .85.

### Data Collection, Processing, and Analysis of Data

Necessary legal permissions were obtained from the teachers who constituted the sample of the study before starting data collection. Then, the data were collected by sending the link to the online form containing the data collection tools to the teachers who voluntarily participated in the study by the researchers. The data belonging
to 404 scales filled out by the participants through the link sent were included in the analysis. The collected data were analyzed using the SPSS 25.0 program. Before starting the analysis, it was examined whether the collected data met the normality assumptions. George and Mallery (2003) state that if the skewness and kurtosis coefficients are within the range of ±2, the distribution of the data meets the normality assumption. Based on this information, the skewness and kurtosis values and Q-Q graphs of the data were examined and it was concluded that the scores of teaching (-.170 to -1.122), interaction (-.072 to -1.029), patience (scale total score) (-.165 to -1.164) and resilience (scale total score) (-.064 to -.988) were within the normal distribution limits.

In the analyses, the significance of the difference between the means was tested at .05 level. In the interpretation of arithmetic means, the range of 1.00-1.79 was considered as "very low", 1.80-2.59 as "low", 2.60-3.39 as "medium", 3.40-4.19 as "high" and 4.20-5.00 as "very high". In the interpretation of the correlation analysis, the range of .00-.30 was accepted as "low", the range of .31-.70 as "medium" and the range of .71-1.00 as "high" level relationship (Büyüköztürk, 2011). Descriptive statistics, correlation, and regression analysis were used to analyze the data.

Findings

The arithmetic mean, standard deviation, and skewness-kurtosis values of teachers' patience levels and professional resilience levels are presented in Table 2.

Table 2. Frequency and Percentage Values of Personal Information Arithmetic Mean, Standard Deviation, and Skewness-Kurtosis Values Related to the Variables of the Study

<table>
<thead>
<tr>
<th></th>
<th>x̄</th>
<th>Sd</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teaching</td>
<td>3.99</td>
<td>.69</td>
<td>-.170</td>
<td>-1.122</td>
</tr>
<tr>
<td>2. Interaction</td>
<td>3.83</td>
<td>.64</td>
<td>-.072</td>
<td>-1.029</td>
</tr>
<tr>
<td>3. Teacher Patience Scale (Total)</td>
<td>3.92</td>
<td>.63</td>
<td>-.165</td>
<td>-1.164</td>
</tr>
<tr>
<td>4. Teacher Professional Resilience Scale (Total)</td>
<td>3.94</td>
<td>.61</td>
<td>-.064</td>
<td>-.988</td>
</tr>
</tbody>
</table>

When Table 2 was examined, it was found that teachers' patience levels (scale total score) (x̄=3.92) and professional resilience levels (scale total score) (x̄=3.94) were at high levels.

Comparison of Teachers' Patience Levels and Professional Resilience Levels in Terms of Demographic Variables

Independent groups t-test was conducted to determine whether the patience scale and professional resilience scale scores of the teachers constituting the sample group showed a significant difference according to gender variable.
Table 3. Independent Groups t Test Results for Gender Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
<th>$\bar{x}$</th>
<th>Sd</th>
<th>Se</th>
<th>t</th>
<th>Df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Patience Scale (Total)</td>
<td>Female</td>
<td>221</td>
<td>3.95</td>
<td>.63</td>
<td>.04</td>
<td>.94</td>
<td>402</td>
<td>.344</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>183</td>
<td>3.89</td>
<td>.63</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Professional Resilience Scale (Total)</td>
<td>Female</td>
<td>221</td>
<td>3.96</td>
<td>.58</td>
<td>.03</td>
<td>.74</td>
<td>402</td>
<td>.459</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>183</td>
<td>3.92</td>
<td>.64</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 3, as a result of the independent samples t-test, the difference between the arithmetic averages of the groups for the patience scale ($t = .94; P > .05$) and professional resilience scale ($t = .74; P > .05$) scores according to gender variable was not found significant.

Independent samples t-test was conducted to determine whether the patience scale and professional resilience scale scores of the sample group teachers showed a significant difference according to the education level variable.

Table 4. Independent Groups t Test Results for Education Level Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
<th>$\bar{x}$</th>
<th>Sd</th>
<th>Se</th>
<th>t</th>
<th>Df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Patience Scale (Total)</td>
<td>Associate/Undergraduate Degree</td>
<td>298</td>
<td>3.95</td>
<td>.62</td>
<td>.03</td>
<td>1.77</td>
<td>402</td>
<td>.078</td>
</tr>
<tr>
<td></td>
<td>Postgraduate Degree</td>
<td>106</td>
<td>3.83</td>
<td>.66</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Professional Resilience Scale (Total)</td>
<td>Associate/Undergraduate Degree</td>
<td>298</td>
<td>3.96</td>
<td>.62</td>
<td>.03</td>
<td>1.08</td>
<td>402</td>
<td>.279</td>
</tr>
<tr>
<td></td>
<td>Postgraduate Degree</td>
<td>106</td>
<td>3.89</td>
<td>.59</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 4, as a result of the independent samples t-test, the difference between the arithmetic averages of the groups for the patience scale ($t = 1.77; P > .05$) and professional resilience scale ($t = 1.08; P > .05$) scores according to the educational status variable was not found significant.

One-way analysis of variance (ANOVA) was conducted to determine whether the patience scale and professional resilience scale scores of the sample group teachers showed a significant difference according to the professional seniority variable.
As seen in Table 5, as a result of the one-way analysis of variance (ANOVA), the difference between the arithmetic averages of the groups for the patience scale ($F = 5.29$; $p < .05$) and resilience scale ($F = 3.53$; $p < .05$) scores according to the professional seniority variable was found significant. Post hoc analysis was performed to determine which groups the significant difference was between. Before this analysis, Levene's test showed that the variances were homogeneous. Therefore, LSD analysis was performed. As a result of the analysis, it was found that the significant difference in both scale scores was in favor of teachers with 20 years and less seniority. In other words, teachers with 21 years and more professional seniority have lower levels of both patience and professional resilience.

One-way analysis of variance (ANOVA) was conducted to determine whether the patience scale and professional resilience scale scores of the teachers in the sample group showed a significant difference according to the level of education.

Table 6. One-Way Analysis of Variance (ANOVA) Results for the Variable of Educational Level of Employment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
<th>$\bar{x}$</th>
<th>Sd</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>p</th>
<th>LSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Patience Scale (Total)</td>
<td>Primary School</td>
<td>109</td>
<td>4.50</td>
<td>.42</td>
<td>Between Groups</td>
<td>71.94</td>
<td>2</td>
<td>35.97</td>
<td>157.17</td>
<td>.000</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>169</td>
<td>3.95</td>
<td>.53</td>
<td>Between Groups</td>
<td>91.77</td>
<td>401</td>
<td>.22</td>
<td>401</td>
<td>.37</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>126</td>
<td>3.39</td>
<td>.43</td>
<td>Within Groups</td>
<td>163.72</td>
<td>403</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>404</td>
<td>3.92</td>
<td>.63</td>
<td>Total</td>
<td>163.72</td>
<td>403</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Professional Resilience Scale (Total)</td>
<td>Primary School</td>
<td>109</td>
<td>4.40</td>
<td>.45</td>
<td>Between Groups</td>
<td>45.37</td>
<td>2</td>
<td>22.68</td>
<td>84.93</td>
<td>.000</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>169</td>
<td>3.96</td>
<td>.58</td>
<td>Within Groups</td>
<td>107.10</td>
<td>401</td>
<td>.26</td>
<td>401</td>
<td>.37</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>126</td>
<td>3.52</td>
<td>.46</td>
<td>Total</td>
<td>152.48</td>
<td>403</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>404</td>
<td>3.94</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As seen in Table 6, as a result of the one-way analysis of variance (ANOVA), the difference between the arithmetic averages of the groups for the patience scale (F= 157.17; p<.05) and professional resilience scale (F= 84.93; p<.05) scores according to the level of education.

Post hoc analysis was performed to determine which groups the significant difference was between. Before this analysis, it was found that the variances were not homogeneous with Levene’s test. Therefore, Dunnett C analysis was performed. As a result of the analysis, it was found that there was a significant difference in both scale scores between teachers working in primary schools and teachers working in secondary schools and high schools in favor of teachers working in primary schools; and between teachers working in secondary schools and teachers working in high schools in favor of teachers working in secondary schools. In other words, as the level of education in which teachers work increases, their patience levels and professional resilience levels decrease.

One-way analysis of variance (ANOVA) was conducted to determine whether the patience scale and professional resilience scale scores of the sample group teachers show a significant difference according to the number of teachers in the school where they work.

Table 7. One-Way Analysis of Variance (ANOVA) Results for the Number of Teachers in the School

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
<th>̄X</th>
<th>Sd</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Patience Scale</td>
<td>20 or fewer</td>
<td>56</td>
<td>3.93</td>
<td>.66</td>
<td>Between Groups</td>
<td>.70</td>
<td>2</td>
<td>.35</td>
<td>.87</td>
<td>.419</td>
</tr>
<tr>
<td></td>
<td>20-40</td>
<td>178</td>
<td>3.96</td>
<td>.63</td>
<td>Within Groups</td>
<td>163,01</td>
<td>401</td>
<td>.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40 or more</td>
<td>170</td>
<td>3.87</td>
<td>.62</td>
<td>Total</td>
<td>163.72</td>
<td>403</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>404</td>
<td>3.92</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Teacher Professional Resilience Scale</td>
<td>20 or fewer</td>
<td>56</td>
<td>3.91</td>
<td>.64</td>
<td>Between Groups</td>
<td>.11</td>
<td>2</td>
<td>.05</td>
<td>.15</td>
<td>.861</td>
</tr>
<tr>
<td></td>
<td>20-40</td>
<td>178</td>
<td>3.96</td>
<td>.62</td>
<td>Within Groups</td>
<td>152.36</td>
<td>401</td>
<td>.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40 or more</td>
<td>170</td>
<td>3.93</td>
<td>.59</td>
<td>Total</td>
<td>152.48</td>
<td>403</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>404</td>
<td>3.94</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Relationships between Variables

The relationships between the dependent and independent variables of the study are presented in Table 8:

Table 8. Relationships between Variables

<table>
<thead>
<tr>
<th>Teacher Patience Scale</th>
<th>Teacher Professional Resilience Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>.856**</td>
</tr>
<tr>
<td>p</td>
<td>.000</td>
</tr>
</tbody>
</table>

**p<.001; N=404
As a result of Pearson correlation analysis, it was found that there was a positive, high-level, and significant relationship ($r = .856; p<.001$) between teachers’ patience levels and their professional resilience.

Simple linear regression analysis was conducted to examine the effect of teachers’ patience levels on their professional resilience and the results are presented in Table 9.

Table 9. The effect of teachers’ patience levels on their professional resilience.

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. E.</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>R</th>
<th>$R^2$</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.705</td>
<td>0.099</td>
<td>7.117</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patience</td>
<td>0.826</td>
<td>0.025</td>
<td>0.856</td>
<td>33.133</td>
<td>0.000</td>
<td>.856</td>
<td>.73</td>
<td>1097.76</td>
<td>0.00</td>
</tr>
</tbody>
</table>

As seen in Table 9, as a result of the simple linear regression analysis, teachers’ patience levels were found to be a significant predictor of their professional resilience ($F(1-402)=1097.76; p<0.001$). It was determined that teachers’ patience levels explained 73% ($R^2=0.73$) of the variance in their professional resilience. When the t-test result regarding the significance of the coefficient of the predictor variable in the regression equation ($B=.826$) is analyzed, it is seen that the patience scale is a significant predictor of the professional resilience scale ($p<0.000$).

According to the regression analysis results, the regression equation predicting the professional commitment scale is as follows:

Professional resilience = (.826 x Patience) + 0.705

**Discussion and Conclusion**

This study, which examined the relationship between teachers’ patience levels and their professional resilience, was conducted with teachers working in public schools in the Kartal and Tuzla districts of Istanbul province in the 2022-2023 academic year. As a result of the research, it was determined that the patience levels of teachers were high. In a study examining the relationship between teachers’ psychological resilience, patience, and happiness levels, similar to the results of this study, it was observed that teachers’ patience levels were above average (Ulukan & Ulukan, 2021). It is known that showing high patience against unwanted events distracts people from unwanted emotional states such as depression and enables them to accept the events (Schnitker, 2012). Considering that teaching is a profession that requires patience (Duman & Taş, 2021; Meriç & Erdem, 2023; Shishavan & Sadeghi, 2009), it can be said that the results obtained are desirable. As a result of the research, it was seen that teachers’ professional resilience was also high. When the literature is examined, it is seen that the studies support the results obtained from this research and show that teachers’ professional resilience is high (Argon & Kaya, 2018; Li et al., 2019; Limon, 2022; Peixoto et al., 2020). Based on these results regarding teachers' high resilience levels, it can be said that teachers use the available resources in the
right way, pursue their profession with a high sense of purpose, have responsibility, and establish healthy relationships with other stakeholders they are in contact with (Limon, 2022).

The findings of the study showed that teachers' scores on the patience and professional resilience scale did not differ significantly according to their gender, educational status, and the number of teachers in their schools. In a study supporting the results of this research, it was observed that while the patience levels of teachers in the interaction dimension did not differ according to gender, the general patience level and the patience level in the teaching dimension of female teachers were lower (Meriç & Erdem, 2023). While the patience levels of teachers in this study did not show a significant difference according to their educational background, in another study, it was determined that the patience levels in the teaching dimension differed in terms of educational background and the patience levels of associate degree graduates in the teaching dimension were higher than both undergraduate and graduate graduates. In the study, it was seen that associate degree graduates were generally experienced teachers with more years of service and it was evaluated that such a difference occurred due to higher professional experience (Meriç & Erdem, 2023). Although studies are showing that teachers' professional resilience does not differ according to gender and educational status (Argon & Kaya, 2018; Brouskeli et al., 2018; Limon, 2022), it is possible to see different results in the literature.

In the study, it was examined whether the variable of the number of teachers in the school where the teachers work could affect their work distribution and their communication with their stakeholders, and it was seen that the patience and professional resilience of the teachers did not differ significantly according to the number of teachers in the school. No study was found to address this variable. According to another finding obtained from the study, teachers' patience scale and professional resilience scale scores show a statistically significant difference according to the professional seniority variable. Both patience and resilience levels of teachers with 21 years or more of professional seniority are lower than those of teachers with less than 21 years of seniority. When similar studies were examined, it was seen that as professional seniority increases, patience levels and professional resilience levels increase in support of the result obtained from this study (Botou et al., 2017; Meriç & Erdem, 2023). The increase in teachers' experience with their advancing age will enable them to be more patient and more resilient in overcoming difficulties (Bobek, 2002; Gu & Day, 2007; Limon, 2022).

According to another finding obtained from the research, teachers' patience scale and professional resilience scale scores show a statistically significant difference according to the level of education in which teachers work. According to this finding, patience and professional resilience levels decrease as the level of education at which teachers work increases. The patience and resilience levels of teachers working in primary schools are higher than those working in middle and high schools. Similarly, the patience and resilience levels of teachers working in secondary schools are higher than those working in high schools. When similar studies are examined, similar to the result obtained from this study, it is seen that teachers' professional resilience is higher at lower levels of education such as preschool and primary school compared to other levels (Argon & Kaya, 2018; Brouskeli et al., 2018; Limon, 2022). It is thought that the fact that teachers work with students in the younger age group reflects positively on their resilience levels (Limon, 2022). However, there is a need to
conduct research examining whether teachers' patience levels differ according to the type of level they work at.

In the study, it was found that there was a positive, high-level, and significant relationship between teachers' patience levels and their professional resilience. As a result of the regression analysis, it was found that the patience scale was a significant predictor of the professional resilience scale. When the literature is examined, studies show that there is a relationship between patience and psychological resilience (Eliüşük, 2014; Khormaei et al., 2017). Considering that professional resilience can be considered as a sub-dimension of psychological resilience (Çetin, 2020), it is thought that the studies can support the findings obtained from this study. Again, in a study conducted with teachers, a significant relationship was observed between teachers' patience and psychological resilience (Ulukan & Ulukan, 2021), while in another study, a negative relationship was observed between teachers' patience levels and burnout (Meriç & Erdem, 2023). While there are a limited number of studies examining the patience levels of teachers in the literature (Meriç & Erdem, 2022; Meriç & Erdem, 2023; Niyazibeyoğlu & Dağcı, 2023; Türkgeldi, 2019; Ulukan & Ulukan, 2021), no study was found to address the relationship between teachers' patience and professional resilience levels. Patience can be considered a personality trait that enables teachers to continue their profession successfully and is an important life value that can increase their professional resilience (Gültekin, 2020; Norling, 2009). Therefore, knowing how teachers' patience levels are related to their professional resilience can shed light on practices that can increase teachers' patience levels. Based on all these, it is thought that the research will contribute to the field.

**Recommendations**

As a result of the research, it is recommended that teachers' patience and professional resilience levels should be further examined within the scope of various demographic variables. In this way, the factors affecting teacher patience and resilience can be better recognized and intervention plans can be made to increase patience and resilience in the desired way. Considering that improving teachers' patience levels increases their professional resilience, it is recommended that plans that can increase teachers' patience should be made both by the country administration and the administration of the institution where they work. Organizing various psychoeducation programs by school psychological counselors and universities to increase the patience level of teachers and implementing them at regular intervals can make significant contributions to the professional resilience of teachers by increasing patience, which is a developable trait. Considering that the increase in teachers' patience and professional resilience will have important reflections on students and the education system, researchers are recommended to increase the number of quantitative and qualitative studies examining the relationships between patience and professional resilience. There are also some limitations in this study. The study is limited to teachers working in public schools in Kartal and Tuzla districts of Istanbul province in the 2022-2023 academic year and the data obtained as a result of teachers' responses to the scale questions used in the research.
References


Çetin, Y. C. (2020). *Examination of the relationship between teachers’ perceptions of personal-measles competence and professional resilience beliefs* (Master's Thesis), Kahramanmaraş Sütçü İmam University Institute of Social Sciences, Department of Educational Sciences.


Elüsüük, A. (2014). *Investigation of patience tendency in terms of self-determination, self-understanding and personality traits* (Doctoral Dissertation), Necmettin Erbakan University Institute of Educational Sciences Psychological Counseling and Guidance Department.


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<td><a href="https://orcid.org/0000-0003-4360-4288">https://orcid.org/0000-0003-4360-4288</a></td>
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<td>Marmara University Atatürk Eğitim Fakültesi Göztepe Yerleşkesi 34722 Kadıköy/İstanbul/Türkiye</td>
</tr>
</tbody>
</table>