Intrinsic motivation in preschool children: Predictive effect on levels of resilience

Saide Özbey*, Gazi University, Gazi Faculty of Education, Primary Education, Ankara, Turkey

H. Elif Dağlıoğlu, Gazi University, Gazi Faculty of Education, Primary Education, Ankara, Turkey

Safiye Sarıcı Bulut, Gazi University, Gazi Faculty of Education, Department of Educational Sciences, Turkey

Suggested Citation:

Received from April 06, 2023; revised from August 20, 2023; accepted from October 10, 2023.
©2023 by the authors. Licensee Birlesik Dunya Yenilik Arastirma ve Yayincilik Merkezi, North Nicosia, Cyprus. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Abstract

This study was conducted to explain the relationship between motivation and psychological resilience of preschool children. The study group consists of a total of 202 children, 107 girls and 77 boys, aged 36-72 months, attending various pre-school education institutions in the capital city of Turkey. In this study, which was designed in a relational screening model, the Motivation Scale for Preschool Children was used to determine the motivation levels of children, and the Social-Emotional Well-Being and Resilience Scale for Preschool Children were used to define their psychological resilience. Pearson correlation coefficient and multiple regression analysis were used in the evaluation of the obtained data. As a result of the research, it was found that there was a moderate and high-level positive relationship between the motivation levels of children and their psychological resilience. Additionally, in multiple regression analyses based on the resilience of children's motivation levels, it was found that motivation subscales predicted resilience at medium and high levels. In the light of this result, it has been suggested to develop scales on specific issues to apply to children and prepare intervention programs that reflect the common denominators of psychological resilience and motivation since scales developed on motivation and resilience in future studies are prepared mostly based on the opinions of parents and teachers.

Keywords: Preschool education, children, intrinsic motivation, psychological resilience, well-being

* *ADDRESS OF CORRESPONDENCE: Saide Özbey, Gazi University Faculty of Education, Primary Education Turkey
Email Address: saideozbey@gmail.com
1. Introduction

Today, with the development of positive psychology, it is noteworthy that approaches reveal the potentials of individuals and activate them by focusing on their strengths instead of focusing on and examining the weaknesses of individuals. Psychological resilience, which is one of the concepts of positive psychology, shows the ability of individuals to realize the adaptation process despite all the negativities without interrupting their developmental periods when faced with a negative situation. It is stated that children who are exposed to unfavorable life events such as violence, poverty, natural disasters, broken family structure, and terrorism are in the risk group for psychological resilience. Although the psychological resilience level of the children in these processes is an innate aspect like some personality traits, variables such as school, family, and social environment also have a significant effect on the level of resilience (Masten et al., 2008). For this reason, it is emphasized today that it is important for individuals who are actively involved in the care and education process of children to provide supportive and sensitive care by reading the developmental needs of children correctly during periods considered developmentally critical, to support the child’s academic and social skills, and to help children become more resilient (Alvord & Grados, 2005; Ginn et al. 2022; Humphreys et al., 2022; Israelashvili & Wegman-Rozi, 2003; Özbey, 2019; Žveglič Mihelič et al., 2022).

The preschool is a period in which there are many critical developmental tasks mentally, socially/emotionally, and physically, also developmental achievements affect the readiness of the individual in the following years. In the preschool period, children start on many psychological activities such as language, symbolic thought, and sensory-motor coordination, and they are dependent on adults. With the advancement of age, children gain school preparation skills by increasing their proficiency (Santrock, 2012:16). Piaget, who created important perceptions for understanding the mental abilities of children, classified the cognitive development of the preschool period as sensorimotor stage and pre-operational period. While pre-school children develop in mental, moral, and language areas, they also participate in social processes and realize their personal development (Gander & Gardiner, 2010). The preschool period can also be expressed as a critical process in recognizing and understanding the individual. During this period, children gain many features such as psychological resilience and motivation as a part of their selves.

In an unfavorable condition, psychological resilience refers to the adaptation of individuals to their lives despite the negativities in situations that occur with the interaction of protective factors and risk factors. In resilience, which is a dynamic process, the individual adapts despite being exposed to a significant threat, serious distress or major attacks on the development process (Gunnestad, 2006; Luthar & Zigler, 1991; Luthar et al., 2000; Masten, 2001). Derived from the Latin root “resiliens”, this concept expresses that a substance is elastic and can easily return to its original form (Greene as cited in Gizir, 2007). Psychological resilience in children, on the other hand, means that the child can regain his old form after a crisis or distress, cope with, and be successful in life despite facing difficulties (Gunnestad, 2006).

There are three crucial dimensions in psychological resilience. The first of these is risk or difficulty; the second is positive adaptation, coping, and competence, and the third is protective factors (Gizir, 2007). The dose of exposure and the variables in their lives are considered important in resilience in children (Masten & Barnes, 2018). Children's adaptation in a way that they can return to their normalcy when faced with a difficult situation may be due to many innate and later acquired traits. In difficult times, children's gaining awareness of their inner strengths, focusing on their strengths, producing solutions, turning to alternative solutions, and being hopeful will make them psychologically stronger individuals.
Childhood can be considered a critical period in the formation of personality traits that reflect psychological resilience (Şahan Aktan & Önder, 2018). In addition to the internal factors affecting psychological resilience in children, the character and the quality of the relationship in family and social interaction are considered significant (Mandleco & Peery, 2007). In addition, many motivational personality traits such as self-regulation, self-efficacy belief, perseverance, problem-solving, and taking an initiative function as protective factors in resilience (Ernst et al., 2019). It is stated that children's psychological resilience skills will support their correct and flexible thinking, and adults' positive and warm child-rearing attitudes support children's psychological resilience (capacity for resilience) for life (Kordich Hall & Pearson, 2005). On the other hand, he underlined that the level of resilience is also related to the development of inherited traits from the parents in childhood and adolescence. For this reason, the concepts of motivation and resilience need to be explained as a multidimensional subject that concerns all developmental areas and needs.

One of the variables to be addressed in the formation and development of children's psychological resilience skills is motivation. When considering motivation in children, cognitive, affective, and behavioral dimensions should not be ignored. In addition, internal and external instruments that motivate them, indirect learning in motivation, their responses to reinforcements given in the right ratio and range, the characteristics of the individuals they model, the social atmosphere, and needs are also discussed. It can be added to these dimensions how the needs in Maslow's theory, which includes a process from physiological requirements to self-actualization, directs and mobilizes children. While motivation is a multifaceted structure, it is also at the center of biological, cognitive, and social regulation (Dağlıoğlu, 2022; Ryan & Deci, 2000).

The motivation, which is expressed as the situation that activates the individual, is a cyclical structure in the form of feeling the need, satisfying, and relaxing. While some motives are inherited, many are realized through the learning process. An important element in an individual's action is how he perceives and interprets situations and events. In this process, there are two attributions; internal and external. Internal attribution is defined as the association of individuals with their characteristics for the cause of their behaviors and situations, and external attribution is when they relate to external factors as the cause of behaviors and situations (Bacanlı, 2011).

Ensuring that children with inborn intrinsic motivation take action with intrinsic motivation in their family and school environments, assigning the true meaning to their lives, and making supportive approaches will support their developmental processes. In the studies conducted, it was seen that the motivation of children in terms of gaining attitudes towards literacy was high (Mata, 2011), achievement motivation emerged earlier than previously stated (Galejs et al., 1987), and when they started school, their intrinsic motivation decreased and was replaced by extrinsic motivation (Carlton & Winsler, 1998). Experimental studies showed that extrinsic reinforcers reduced intrinsic motivation in children (Anderson et al., 1976; Lepper & Greene, 1975; Loveland & Olley, 1979). In addition, it was stated that achievement motivation in childhood contributed significantly to future success predictions (Bridgeman & Shipman, 1978).

When we look at the studies on motivation and resilience in the literature, it is possible to see that these two concepts have common denominators in many ways and that they can affect each other directly or indirectly. Motivation can be expressed as a theoretical structure used to explain the beginning, direction, intensity, persistence, quality of behavior, and particularly goal-oriented behavior (Maehr & Meyer, 1997; Santrock, 2012:438; Schunk, 2009:393). Children's innate feelings of curiosity and discovery motivate them internally (Ryan & Deci, 2000). At the same time, there is a positive
relationship between motivation, which is accepted as one of the prerequisites for learning and success (Akbaba, 2006).

In the study examining the relationship between children's motivation levels, social skills, and problem behaviors, it was stated that there was a positive relationship between social skills and motivation scores, and a negative relationship between problem behaviors and motivation (Özbey & Aktemur Gürler, 2019). In a similar study on Chinese children; it was observed that children with high motivation exhibited less maladaptive behavior (Wang et al., 2003). Besides, it was stated that there was a negative relationship between children's motivations and destructive problem solving, and a positive relationship between constructive problem solving (Köyceğiz & Özbey, 2019); and a positive relationship between secure attachment and intrinsic motivation (Gözübüyük & Özbey, 2019).

In the studies on resilience, it was stated that there was a positive relationship between secure attachment and resilience, positive emotions, secure attachment, and optimism were significant variables that predicted resilience (Karairmak & Guloğlu, 2014). It was also stated that social commitment and belonging had a mediating role in the relationship between psychological abuse and resilience (Arslan, 2015), and that positive and negative emotions predicted resilience (Karairmak & Siviş Çetinkaya, 2011). It was emphasized that resilience had an inverse relationship with childhood traumas and a linear relationship with attachment (Bindal, 2018); that psychological abuse was negatively related to resilience, and resilience played a fully mediating role in the relationship between psychological abuse and subjective well-being (Bostan, 2018).

Moreover, it was observed that there was a relationship between resilience and social support, and that perceived family support predicted resilience (Gez, 2018). It was also stated that emotional resilience in the preschool period was negatively related to anxiety and depression (Conway & McDonough, 2006). It was stated that preschool teachers achieved high scores in the psychological resilience criteria that they were supportive and willing to implement the programs aimed at increasing the resilience of children. In addition, it was also stated that the more resilient the teachers perceived themselves, the more competent they were in developing children. In the same study, it was stated that parents evaluated children's resilience more favorably than teachers (Bouillet et al., 2014). Similarly, it was stated that there was a relationship between the success motivation of children and the success grade of the teacher (Galejs et al., 1987). In the study conducted on maltreated children, it was emphasized that peer games and social interaction provided positive development (Fantuzzo et al., 1996). The studies in question went beyond the determination of the characteristics of healthy children and focused on determining the factors that would help the development of psychological resilience (Gizir, 2007).

When studies are examined, it is possible to say that the concepts of motivation and resilience are positively related to the concepts such as secure attachment, prosocial behaviors, and constructive problem solving; and negatively related to concepts such as destructive problem solving, problem behaviors, and insecure attachment. When the literature on resilience is examined, it can be stated that it focuses mostly on contextual risk factors such as poverty and maltreatment (Degnan & Fox, 2007). In addition, although children at risk experience more problems than the general population, it is seen that most of them fulfill their developmental tasks and become healthy young adults. These children are reported to have social competence, problem-solving skills, autonomy, and positive feelings about their future and goals (Benard, 1993). Based on the findings that one-third of children exhibit resilience despite adverse conditions and that they can improve their resilience at the same rate as adults when they reach the age of 9 (Henderson Grotberg, 2001), it can be stated as an indicator that children have the motivation to fulfill the skills that protect their psychological resilience. It is also emphasized that
personality traits such as emotional regulation and self-evaluation of children exposed to programs related to psychological resilience increase significantly (de Villers & van den Berg, 2012; LeBuffe, 2002).

Children's physical, mental, and emotional abilities constitute a crucial part of their cognitive and social skills. Increasing the psychological resilience of children experiencing difficulties will create differences in their adaptability and thus support the development of the child (Chen et al., 2021). Considering that children exposed to risk factors at an early age may face a high risk of academic difficulties (Maier & Vitiello, 2012), it is crucial to develop and promote children's psychological resilience as early as possible. Otherwise, concerns about the adverse effects of negative childhood experiences on lifelong development have increased (Masten & Barnes, 2018). All these findings indicate that revealing the relationship between psychological resilience and motivation in preschool children will contribute to the field. Because the concepts of motivation and psychological resilience need to be explained as a multidimensional issue that concerns all developmental areas and developmental needs.

2. Method

2.1. Research method

Since the relationship between children's motivation and psychological resilience levels were examined in the study, the research was realized in the relational screening model. Studies examining the relationships and connections are considered as relational research (Büyüköztürk et al., 2014). The dependent variable of the study is the psychological resilience levels of children. The independent variable of the study is the motivation levels of the children.

2.2. Study group and procedure

The ethics committee permissions of the research were obtained with the meeting decision of the Gazi University Ethics Committee, dated 10.11.2020 and numbered 11. The study group of the research consists of a total of 202 children aged between 36-72 months, selected by simple random sampling method, attending kindergartens affiliated to public institutions, kindergartens of primary schools affiliated to the Ministry of National Education, and private pre-school education institutions in Ankara province and districts like Yenimahalle, Mamak and Çubuk in the 2019-2020 academic year. 53% (n=107) of the children were girls and 47% (n=95) were boys. 27.2% (n=55) of the children were 36-48 months old, 29.7% (n=60) were 49-60 months old, and 43.1% (n=87) were 61-72 months old. 60.4% (n=122) of the children have been attending school for one year, 27.2% (n=55) have been attending school for two years, and 12.4% have been attending school for three years. The scales were filled in for each child by the children's teachers.

2.3. Data Collection Tools

The Motivation Scale for Preschool Children (DMQ18): This scale was developed and updated for 30 years by Morgan, Maslin-Cole, Harmon, Busch-Rossnagel, Jennings, HauserCram, and Brockman (Morgan et al., 2015). The scale is a 5-point Likert-type scale scored as 1=Not at all likely, 5=Extremely likely. It is filled by the teachers on behalf of the children. A high score on the scale means high motivation levels. The Motivation Scale for Preschool Children (DMQ18), which was finally revised in 2019, consists of 7 subscales (Cognitive Persistence, Gross Motor Persistence, Social Persistence with Adults, Social Persistence with Children, Mastery Pleasure, Negative Reaction and General Competence), and 39 items. The items of the scale aim to measure their perseverative behavior of children, mood in success/failure situations, ability to manage interaction in their relationships with adults and peers, and their patience and perseverance to succeed in difficult tasks (Morgan et al., 2019).
The domestic adaptation study of the “Motivation Scale for Preschool Children (DMQ18)” for 36-72 months old children was carried out by Özbey and Dağlıoğlu (2017). As a result of the Confirmatory Factor Analysis performed to confirm the factor structure of the scale, the 7-factor structure of the scale was certified. Cronbach Alpha reliability coefficients of the scale ranged from .84 to .91, while Spearman-Brown Two Half Test reliability coefficients ranged from .77 to .90. The test-retest reliability of the scale was .85 (Özbey & Dağlıoğlu, 2017).

Özbey (2018) conducted the validity and reliability study (n=401) of the “Motivation Scale for Preschool Children (DMQ18)” in the Ankara sample. As a result of the Confirmatory Factor Analysis within the scope of the study, the seven-factor structure of the scale was confirmed; and the model's $\chi^2=2311.91$, degrees of freedom (df) was determined as $=681$, $\chi^2$/df=3.39. Other goodness-of-fit index values of the scale were determined as REMSEA= 0.077; SRMR =0.052; RMR =0.067; NNFI=0.98, NFI=0.97, and CFI=0.98. In the Ankara sample, the Cronbach Alpha reliability coefficients of the scale ranged from .87 to .91. The scale was filled by the teachers for each child.

Alpha reliability coefficients of the “Motivation Scale for Preschool Children (DMQ18)” in this study were .916 for the Cognitive Persistence subscale; .92 for Gross Motor Persistence subscale; .868 for the Social Persistence with Adults subscale; .867 for Social Persistence with Children subscale, .87 for Mastery Pleasure subscale, .835 for Negative Reaction subscale; and for the General Competence subscale, it was determined as .917.

Social-Emotional Well-Being and Resilience Scale for Preschool Children (PERIK): The PERIK scale was developed by Mayr and Ulich (2009) to measure the social and emotional well-being and psychological resilience levels of children, and studies on the scale dated back to 1997. The scale consists of six subscales named Communicating/Social Performance, Self-Control/ Thoughtfulness, Assertiveness, Emotional Stability/Coping with Stress, Task Orientation, and Pleasure in Exploring. Each of the subscales has 6 items, and the total number of items in the scale is 36. Items 5 and 6 in the Emotional Stability/Coping with Stress subscale and item 6 in the Task Orientation subscale are scored inversely. The scoring of the scale is Always=5, Usually=4, Partly=3, Rarely=2, and Never=1.

In the Communication/Social Performance subscale, there are items related to communication and interaction of children with their peers, rules, empathy, self-control, and thoughtfulness in the Self-Control/ Thoughtfulness subscale; full protection one's rights on assertiveness subscale; emotional regulation and the ability to recover after stress in the Emotional Stability/Coping with Stress subscale; the ability to do work alone and concentrate on a task in the Task Orientation scale; and wish to discover new things in the Pleasure in Exploring subscale.

The reliability coefficients in the original scale were .88 in the Communication/ Social Performance subscale; .86 in the Self-Control/ Thoughtfulness subscale; .81 on the assertiveness subscale; .82 on the Emotional Stability/Coping with Stress subscale; .85 in the Task Orientation subscale; and it was .86 in the Pleasure in Exploring subscale (Mayr & Ulich, 2009).

The validity and reliability study of the scale in Turkey was carried out by Özbey (2019). Language equivalence of the scale as a result of the Pearson Product- Moment Correlation Coefficient between the total scores obtained from the Turkish and English scales was calculated as; .98 in Communication/Social Performance subscale; .96 in the Self-Control/Thoughtfulness subscale; .98 on the Assertiveness subscale; .95 on the Emotional Stability/Coping with Stress subscale; .98 in the Task Orientation subscale; and .96 in the Pleasure in Exploring subscale, thus it was determined that the scale had linguistic validity. To determine the validity and reliability of the scale for Turkish children by
acquiring the final ready-to-apply version of the scale, the scale was filled by their teachers for 342 children aged 36-72 months in the Ankara sample (Özbey, 2019).

Confirmatory factor analysis was performed for the data obtained from the scale and the six-factor structure of the scale was confirmed. When the fit indices of the scale were evaluated, they showed that the model data fit was achieved for the six-factor structure of the adapted scale. As a result of the Pearson correlation test performed to determine the relationship between the subscales, it was determined that there was a moderate and high level of positive and significant relationship between the PERIK subscales (p<0.01).

Alpha reliability coefficients of the scale were =.95 for the Communicating/Social Performance subscale, =.93 for the Self-Control/Thoughtfulness subscale, =.92 for the Assertiveness subscale, =.86 for the Emotional Stability/Coping with Stress subscale, = .91 for the Task Orientation subscale, and =.94 for the Pleasure in Exploring subscale. Alpha reliability coefficients of the scale according to age groups varied between .72 and .96 in 36-48 months old children; between .88 and .95 in children aged 49-60 months and between .87 and .96 in children aged 61-72 months. Test-Retest reliability analyzes of the PERIK scale were obtained by re-administering the scale to 30 children with an interval of one week. Test-Retest reliability was .99 in the Communication/Social Performance subscale; .98 on the Self-Control/Thoughtfulness subscale; .99 on the Assertiveness subscale; .98 on the Emotional Stability/Coping with Stress subscale; .94 in the Task Orientation subscale; and .98 in the subscale of Pleasure in Exploring (Özbey, 2019). The scale was filled by the teachers for each child.

Reliability coefficients of the PERIK scale for this study was found to be .932 in the Communication/Social Performance sub-scale; .916 in the Self-Control/Thoughtfulness sub-scale; .937 on the Assertiveness sub-scale; .819 in the Emotional Stability/Coping with Stress sub-scale; .911 in the Task Orientation sub-scale; and .949 in the Pleasure in Exploring sub-scale.

2.4 Data analysis

The scales distributed within the scope of the research were filled by the classroom teachers for each child. The collected data were analyzed in the SPSS program. Pearson Correlation Test was conducted to reveal the relationship between children's motivation and resilience levels. In addition, Multiple Regression analysis was conducted to determine the rate of predicting the psychological resilience levels of children's motivation levels.

3. Results

In this section, analyses regarding the relationship between children's motivation levels and their psychological resilience, and whether their motivation levels predict their psychological resilience levels are included. The Pearson Correlation Test, which was conducted to determine the relationship between children's motivation levels and psychological resilience levels, is given in Table 1.

Table 1.

<table>
<thead>
<tr>
<th>Social-Emotional Well-Being and Resilience Scale</th>
<th>Communication</th>
<th>Self-Control</th>
<th>Assertiveness</th>
<th>Emotional Stability</th>
<th>Task Orientation</th>
<th>Pleasure in Exploring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation Persistence</td>
<td>r</td>
<td>.592**</td>
<td>.547**</td>
<td>.579**</td>
<td>.395**</td>
<td>.822**</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Significant at the .01 level.***
According to Table 1, The Motivation Scale for Preschool Children (DMQ18); In Communication (r=.592), Self-Control (r=.547), Assertiveness (r=.579), and Emotional Stability (r=.395) sub-dimensions of the Resilience Scale and the Cognitive Persistence subscale, there was a moderate correlation; whereas, there was a high and positive correlation between Task orientation (r=.822) and Pleasure in Exploring sub-dimensions (r=.792).

In Communication (r=.592), Self-Control (r=.353), Assertiveness (r=.601), Emotional Stability (r=.368), and Task Orientation (r=.643 ) sub-dimensions of the Resilience Scale and the Gross Motor Persistence subscale, there was a moderate correlation (p<0.01); whereas, there was a high and positively significant (p<0.01) relationship with Pleasure in Exploring (r=.730) sub-dimension.

In Communication (r=583), Assertiveness (r=.668), Task orientation (r=.376), Pleasure in Exploring (r=.599) sub-dimensions of the Resilience Scale and the Social Persistence with Adults subscale, there was a moderate correlation; whereas, there was a low and positively significant relationship with Self-Control (r=.275) and Emotional Stability (r=.282) sub-dimensions (p<0.01).

In Communication (r=.772), Self-Control (r=.354), Assertiveness (r=.683), Emotional Stability (r=.393), Task Orientation (r=.469), and Pleasure in Exploring (r=.658) sub-dimensions of the Resilience Scale and the Social Persistence with Children subscale, there was a moderately and positively significant correlation (p<0.01).

In Communication (r=.551), Self-Control (r=.403), Assertiveness (r=.629), Task Orientation (r=.459), and Pleasure in Exploring (r=.699) sub-dimensions of the Resilience Scale and the Mastery
Pleasure subscale, there was a positive and at a moderate level correlation; whereas, there was a low and positively significant relationship (p<0.01) with the Emotional Stability (r=.192) sub-dimension.

There was a low and positively significant relationship between the Negative Reaction subscale and the Assertiveness (p<0.01; r=.195) and Pleasure in Exploring (p<0.01; r=.144) sub-dimensions of the Resilience Scale. In the sub-dimension of Emotional Stability (p<0.05; r=-.178), there was a low and negatively significant relationship. There was no significant relationship in other sub-dimensions.

In Communication (r=.590), Self-Control (r=.462), Assertiveness (r=.598), and Emotional Stability (r=.408) sub-dimensions of the Resilience Scale and General Competence subscale, there was a moderate correlation; whereas, there was a high level and a positive correlation in Task Orientation (r=.793) and Pleasure in Exploring (r=.819) sub-dimensions.

Multiple Regression analyzes were conducted to determine to what extent children's motivation levels predicted their resilience levels. Regression analyzes are given in Table 2-8.

**Table 2.**

Multiple Regression Analysis on the Prediction of PERIK Communication/Social Performance Subscale by the Motivation Scale for Preschool Children (DMQ18)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>T</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cognitive Persistence</td>
<td>.019</td>
<td>.087</td>
<td>.019</td>
<td>.214</td>
<td>.831</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gross Motor Persistence</td>
<td>.067</td>
<td>.060</td>
<td>.076</td>
<td>1.133</td>
<td>.259</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Persistence with Adults</td>
<td>.028</td>
<td>.059</td>
<td>.031</td>
<td>.482</td>
<td>.630</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Persistence with Children</td>
<td>.611</td>
<td>.066</td>
<td>.618</td>
<td>9.313</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mastery Pleasure</td>
<td>.171</td>
<td>.082</td>
<td>.130</td>
<td>2.101</td>
<td>.037</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative Reaction</td>
<td>-.165</td>
<td>.048</td>
<td>-.159</td>
<td>3.410</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Competence</td>
<td>.079</td>
<td>.084</td>
<td>.082</td>
<td>.951</td>
<td>.343</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 2 is examined, it is seen that all subscales of the Motivation Scale for Preschool Children (DMQ18) have a moderate and significant relationship with the Communication subscale of the Psychological Resilience Scale. Motivation scales explain 65.8% of the total variance in the Communication subscale. (R=.811; R²=.658; F=53.420 p<.01). This result can be interpreted as the motivation levels of children are effective in approximately 66% of Communication/Social Performance Skills.

**Table 3.**

Multiple Regression Analysis of the PERIK Self-Control Subscale Predicted by The Motivation Scale for Preschool Children (DMQ18)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>B</th>
<th>T</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERIK Self-Control</td>
<td>Invariant</td>
<td>2.278</td>
<td>.315</td>
<td>7.221</td>
<td>.000</td>
<td>13.121</td>
<td>.567</td>
<td>.321</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive Persistence</td>
<td>.406</td>
<td>.106</td>
<td>.491</td>
<td>3.815</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Subscale | Gross Persistence | Motor Persistence | Social Persistence with Adults | Social Persistence with Children | Mastery Pleasure | Negative Reaction | General Competence | B | Std. Error | β | t | P | F | R | R²
Invariant | -.271 | .303 | -.894 | .372 | 45.198 | .787 | .62 |
Cognitive Persistence | -.147 | .102 | -.139 | -1.442 | .151 |
Gross Persistence | .074 | .070 | .075 | 1.059 | .291 |
Social Persistence with Adults | .265 | .069 | .262 | 3.846 | .000 |
Social Persistence with Children | .277 | .077 | .252 | 3.607 | .000 |
Mastery Pleasure | .386 | .095 | .265 | 4.050 | .000 |
Negative Reaction | -.061 | .057 | -.053 | -1.069 | .286 |
General Competence | .271 | .098 | .253 | 2.771 | .006 |

When Table 3 is examined, it is seen that all subscales of the Motivation Scale for Preschool Children (DMQ18) have a moderate and significant relationship with the Self-Control subscale of the Psychological Resilience Scale. Motivation scales explain 32.1% of the total variance in the Self-Control subscale. (R=.567; R²=.321; F=13.121 p<0.01). This result shows that children's motivation levels are effective on 32% of their self-control skills.

**Table 4.**

*Multiple Regression Analysis of the PERIK Assertiveness Subscale Predicted by the Motivation Scale for Preschool Children (DMQ18)*

| Dependent Variable | Independent Variable Motivation | B | Std. Error | β | t | P | F | R | R² |
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
PERIK Assertiveness subscale | Invariant | -.271 | .303 | -.894 | .372 | 45.198 | .787 | .62 |
Cognitive Persistence | -.147 | .102 | -.139 | -1.442 | .151 |
Gross Persistence | .074 | .070 | .075 | 1.059 | .291 |
Social Persistence with Adults | .265 | .069 | .262 | 3.846 | .000 |
Social Persistence with Children | .277 | .077 | .252 | 3.607 | .000 |
Mastery Pleasure | .386 | .095 | .265 | 4.050 | .000 |
Negative Reaction | -.061 | .057 | -.053 | -1.069 | .286 |
General Competence | .271 | .098 | .253 | 2.771 | .006 |

When Table 4 is examined, it is seen that all subscales of the Motivation Scale for Preschool Children (DMQ18) have a moderate and significant relationship with the Assertiveness subscale of the Resilience Scale. The Motivation Scale for Preschool Children (DMQ18) explain 62% of the total variance in the Assertiveness subscale (R=.787; R²=.62; F=45.128; p<0.01). In other words, 62% of children's Assertiveness skills are determined by their motivation levels.

**Table 5.**

*Multiple Regression Analysis of the PERIK Emotional Stability/Coping With Stress Subscale Predicted by the Motivation Scale for Preschool Children (DMQ18)*

| Dependent Variable | Independent Variable Motivation | B | Std. Error | β | t | P | F | R | R² |
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

When Table 5 is examined, it is seen that the subscales of have a moderate and significant relationship with the Emotional Stability/Coping with Stress subscale of the Psychological Resilience Scale. Motivation scales explain 29.2% of the total variance in the Emotional Stability/Coping with Stress subscale (R=.540; R²=.292; F=11.435; p<0.01). This result can be interpreted as 29% of children's motivation levels are effective on their ability to cope with stress.

Table 6.

Multiple Regression Analysis of the PERIK Task Orientation Subscale Predicted by The Motivation Scale for Preschool Children (DMQ18)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERIK Task orientation subscale</td>
<td>Invariant</td>
<td>.795</td>
<td>.238</td>
<td>.335</td>
<td>.001</td>
<td>72.429</td>
<td>.85</td>
<td>.723</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive Persistence</td>
<td>.603</td>
<td>.080</td>
<td>.616</td>
<td>7.500</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gross Motor Persistence</td>
<td>.110</td>
<td>.055</td>
<td>.121</td>
<td>2.001</td>
<td>.047</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Persistence with Adults</td>
<td>-.071</td>
<td>.054</td>
<td>-.076</td>
<td>-1.303</td>
<td>.194</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Persistence with Children</td>
<td>-.022</td>
<td>.060</td>
<td>-.022</td>
<td>-.360</td>
<td>.719</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mastery Pleasure</td>
<td>-.162</td>
<td>.075</td>
<td>-.121</td>
<td>-2.160</td>
<td>.032</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative Reaction</td>
<td>.045</td>
<td>.045</td>
<td>.042</td>
<td>1.013</td>
<td>.312</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Competence</td>
<td>.288</td>
<td>.077</td>
<td>.292</td>
<td>3.747</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 6 is examined, it is seen that all subscales of the Motivation Scale for Preschool Children (DMQ18) have a moderate and significant relationship with the Task Orientation subscale of the Psychological Resilience Scale. Motivation scales explain 72.3% of the total variance in the Task Orientation subscale (R=.85; R²=.723; F=72.429; p<0.01). This result shows that children's motivation level is 72% effective on their Task Orientation skills.
Table 7.

Multiple Regression Analysis of the PERIK Pleasure in Exploring Subscale Predicted by the Motivation Scale For Preschool Children (DMQ18)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasure in exploring subscale</td>
<td>Invariant</td>
<td>-.451</td>
<td>.207</td>
<td>-2.177</td>
<td>.031</td>
<td>107.097</td>
<td>.891</td>
<td>.794</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive Persistence</td>
<td>.077</td>
<td>.070</td>
<td>.078</td>
<td>1.102</td>
<td>.272</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gross Persistence</td>
<td>.117</td>
<td>.048</td>
<td>.128</td>
<td>2.461</td>
<td>.015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Persistence with Adults</td>
<td>.065</td>
<td>.047</td>
<td>.069</td>
<td>1.389</td>
<td>.166</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Persistence with Children</td>
<td>.093</td>
<td>.052</td>
<td>.091</td>
<td>1.771</td>
<td>.078</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mastery Pleasure</td>
<td>.352</td>
<td>.065</td>
<td>.260</td>
<td>5.399</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negative Reaction</td>
<td>-.021</td>
<td>.039</td>
<td>-.020</td>
<td>-.554</td>
<td>.580</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Competence</td>
<td>.435</td>
<td>.067</td>
<td>.437</td>
<td>6.511</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 7 is examined, it is seen that all subscales of the Motivation Scale have a moderate and significant relationship with the Psychological Resilience Scale's Pleasure in Exploring subscale. Motivation scales explain 79.4% of the total variance in the Pleasure in Exploring subscale (R=.891; R²=.794; F=107.097; p<0.01). In other words, it can be said that the effect of motivation on children's exploratory behavior is 79%.

4. Discussion

In this study, which was conducted to measure the relationship between the motivation levels of 36-72 month-old children in the pre-school period and their social-emotional well-being and psychological resilience, it was found that there were moderate and high-level positive relationships between the motivation levels of the children and their psychological resilience. Besides, in multiple regression analyses conducted to determine to what extent motivation levels predicted resilience, it was found that motivation subscales predicted resilience at medium and high levels. The total variance explained varied between 29% and 79% in the subscales.

Karariumk and Siviş-Çetinkaya (2011) found in their study that individuals with an internal locus of control were more psychologically resilient. In the study, it was stated that the sense of responsibility of people with an internal locus of control developed, and it was stated that people with internal control saw the control of events in themselves instead of seeing them in external factors. This situation was interpreted as it may be easier for individuals to remain more resilient and robust, also adapt to difficulties encountered in life. Martin (2005), on the other hand, emphasized in his study that there was a relationship between positive psychology and motivation and that supporting positive psychology was crucial in increasing motivation in work environments.

Considering the results of this research, it was understood that the intrinsic motivation of children explained approximately ¾ of each of the dimensions of resilience, which were pleasure in exploring and task orientation. It is a known fact that children have an irresistible desire to explore themselves and the world at the first six years of age. However, one of the important factors in this adventure of children's discovery is task orientation, which includes the ability to do work and focus their attention on a certain thing. As a result of research in the field, psychologically sound personality traits were described as;
being able to establish positive social relationships, thinking empathetically, having developed social
skills, being persistent, having a positive self-perception, recognizing and expressing feelings, being
optimistic, being lively, cheerful, calm and relaxed, acting independently and autonomously, being a
problem solver, having various interests and hobbies, being curious and inquisitive, enjoying new
experiences, and not giving up when facing difficulties (Mayr & Ulich, 2003, 2009; Özbey, 2019). Parallel
to this, when highly motivated people who made important discoveries that left their mark in history
were examined, the observation that these people showed a large part of these behaviors among their
distinctive character traits revealed the relationship between intrinsic motivation and resilience
(Hutchinson et al., 2010; Rothbart et al., 2000).

Another result of the study was that the intrinsic motivation of children explained more than 60%
of each of the communication/social performance and assertiveness dimensions of psychological
resilience. When the literature on communication was examined, it was stated that friendly children
were willing to approach new people and environments (Yağmurlu Sanson & Bahar Köymen, 2005).
Children with well-developed communication skills were also generally able to make friends easily and
strength in emotion regulation and positive social skills, which are two vital areas in the development of
preschool children. Controlling their emotions and behaviors requires children to interact more with
others and improving their social skills. In this context, since the children in the study group continued
pre-school education, studies in the field revealed that children who received preschool education had
more ability to express themselves, did not have difficulty in communicating with people around them,
and were more competent in academic and social areas (Aslanargun & Tapan, 2011); also the self
confidence of the children who had good communication with their teachers improved, and their
adaptation to the learning environment was quite high (Ceylan & Kılıç Mocan, 2017).

Another finding obtained from the study was that 32% of children's self-control skills; 29% of
emotional stability and coping skills were explained by motivation levels. Two of the important
dimensions of resilience are “exposure to significant threat or severe distress” and “positive adaptation
despite major attacks on the developmental process” (Luthar et al., 2000; Miljević-Ridčki et al., 2017).
This required individuals to demonstrate multiple skills at different levels that support coping (Alvord,
& Grados, 2005; Cicchetti & Rogosch, 1997). In other words, resilience is the ability of an individual to
adapt to the changes in his life that arise as a result of the interaction of protective factors and risk
factors in the face of suddenly developing negative situations, and this situation can change from person
to person (Bektaş & Özben, 2017; Karaırmak, 2006). Individuals who can provide their control as desired
had an advantage in adapting to stressful situations (Eisenberg et al., 2004). At this point, it can be said
that emotion regulation skills have a significant effect on psychological resilience. While children with
advanced emotion regulation skills display a more resistant, patient, and optimistic point of view against
difficult situations, children who cannot do this may be more pessimistic and impatient towards
difficulties.

Some studies in the field (Artuch-Garde et al., 2017; Causadias et al., 2012; Spinrad et al., 2007)
suggested that there was a relationship between resilience and social competencies, internalization and
externalization problems. As a result of a study conducted by Arend, Gove, and Strouf (1979), it was
revealed that the psychological resilience of children who could think flexibly in the face of problems
and stressful situations, strive to produce solutions, and express themselves appropriately when
together with their peers, was higher. Moreover, as a result of the studies conducted in the field,
positive affect increased the level of psychological resilience of individuals and enabled them to cope
effectively with their distress and stressful situations (Gloria et al., 2013); emotion-focused coping
strategies and emotional management skills were factors that increased psychological resilience (Caston
& Mauss, 2011; Gülay Ogelman & Önder, 2021). Emotion regulation was associated with adjustment, cognitive competence, positive affect, attention, and social interaction, while problems in emotion regulation were associated with anxiety and social inadequacy (Hartman et al., 2017; Mayer et al., 2016).

5. Conclusion, Limitation and Recommendations

As a result, psychologically resilient children are stress-resistant, invincible and resilient, and benefit from protective systems that help them overcome adverse conditions and develop themselves. In this context, a child's intelligence, success in making friends, and ability to regulate his/her behavior appear as intrinsic strengths that improve psychological resilience (Bailey et al., 2013; Cömert & Özbey, 2021; Şahan Aktan & Önder, 2018). Considering that motivation is a power that enables people to take action and move forward in line with their goals, it is revealed that factors such as intrinsic motivation, mental and physical needs, perceptions of value, beliefs, expectations, levels of consciousness, self-efficacy and self-consciousness, risk-taking capacities and coping with anxieties affect the individual's learning positively or negatively (Arıkıl & Yorgancı, 2012; Öner & Özbey, 2022; Ulusoy, 2007; Ünal & Bursalı, 2013). Mihaela (2015) states that building a solid social-emotional foundation during childhood will help children to be successful and happy in life, and when they become adults, they will be better prepared to manage stress and persevere in front of challenges, take risks, and solve problems. It is clear that early childhood holds great promise for interventions to prevent and reduce risk, increase resources, enhance competence, and build a strong foundation for future development (Masten et al., 2013). In light of all these, it can be said that there are strong links between motivation and psychological resilience. However, when the research in the field is examined, it is seen that there are almost no studies that try to reveal this strong link, especially in preschool children.

The results obtained in the study are limited to the Social Emotional Well-Being and Psychological Resilience Scale and the Motivation Scale for Preschool Children (DMQ 18) used in the study, and the data obtained from both scales were based on teacher opinions. Considering that the scales developed on motivation and psychological resilience are relatively limited and mainly based on the thoughts of parents and teachers, scales developed to apply to children on these issues can be improved; Scales designed to apply to children on specific problems can be improved, with these scales, which are applied to teachers, families, and children, the motivation and psychological resilience of children can be examined comparatively. In addition, intervention programs that reflect the common denominators of psychological resilience and motivation can be prepared and implemented, and the effect of the program on children, teachers, and families can be examined. Longitudinal studies can be planned that reveal how psychological resilience and motivation progress over time and which variables are affected. Studies can be supported by qualitative findings.

The results of the research draw attention to the fact that increasing the motivation levels of preschool children can make a significant contribution to the well-being and psychological resilience of children, and the importance of acquiring motivational behaviors in building resilience. From this point of view, it is concluded that educational programs that support motivation in the preschool period can contribute positively to the psychological resilience levels of children by improving their coping, self-regulation, communication, and social interaction skills, contributing to their social-emotional well-being levels.

References


732


