

# Developing a Scale to Measure Parents' Reward and Praise Behaviors for Parental Involvement

Özgür Bolat<sup>1</sup>

## ARTICLE INFO

### Article History:

Received 16.08.2023

Received in revised form

30.09.2023

Accepted

Available online 15.10.2023

## ABSTRACT

Parental involvement in the educational process is crucial for creating an effective learning environment because parents' attitudes directly influence the child's behavior in classrooms. Two important parental behaviors that impact a child's behavior are rewards and praise. While rewards and praise are viewed positively by the behaviorist approach, they are generally perceived negatively by Self-Determination Theory. It is vital for school leaders, researchers, and teachers to explore parents' rewards and praise behaviors, investigate their effects on students, and organize parental involvement programs based on these behaviors. However, there are no reliable and valid scales in the literature that measure parents' reward and praise behaviors. Thus, this scale-development research, conducted with a descriptive survey model, aims to develop two distinct, valid, and reliable scales to measure parents' reward and praise behaviors. According to Exploratory and Confirmatory Factor Analysis results, two separate scales have been developed. The first scale is named "Parental Reward Behavior Scale", and the second one is called "Parental Praise Behavior Scale". The Parental Reward Behavior Scale consists of two sub-dimensions. These factors are named "reward as a control tool" and "reward as a motivation tool". The Parental Praise Behavior Scale consists of a single factor. Confirmatory Factor Analysis has verified the structures of the scale. The Criticism Scale and Disrespect Scale have been used for concurrent validity. A positive relationship has been found between both scales and the developed scale. This finding indicates that reward and praise are negative parental behaviors, confirming the theories of the socio-cognitive school rather than the behavioral school. In conclusion, both the Parental Reward Behavior Scale and the Parental Praise Behavior Scale have been introduced to the literature as valid and reliable measurement tools for teachers, researchers and school leaders.

©TUARA Journal. All rights reserved

### Keywords:

Parental Involvement, Reward, Praise, Scale Development, School Leadership

## INTRODUCTION

Parents are the most crucial factor in facilitating the socialization of children (Ng et al., 2019). Children learn societal norms through their parents. To achieve this goal, parents employ various methods and tools, with rewards and praise being the two most significant ones. However, in the existing literature on rewards and praise, there are both differing opinions and conflicting empirical studies. Similarly, while some researchers advocate for the use of rewards (Horner & Sugai, 2015; Royer et al., 2019), others argue that rewards can lead to certain long-term issues (Gündüz & Balyer, 2011; Ryan & Deci, 2017). In this context, there is a need for valid and reliable measurement tools to investigate how frequently rewards and praise are employed by parents and to explore the benefits and drawbacks of their usage. The use of rewards and praise by parents directly influences a child's behavior both at home and in school. To design effective parental involvement programmes, it is first essential for school leaders and teachers to initially assess parental reward and praise behaviors. The aim of this study is to develop a reliable and valid measurement tool that assesses parents' reward and praise behaviors.

### Different Approaches to Reward and Praise

A reward is an activity or object given based on a condition and perceived as appealing by the recipient (Bolat, 2016). While punishment is employed to reduce the frequency of undesirable behavior, rewards are used as reinforcements to increase the frequency of desired behavior (Erbaş & Yücesoy-Özkan, 2017). For example, if a child completes their homework, he/she might be rewarded with the privilege to use the computer or receive a chocolate. Praise, on the other hand, involves positively evaluating an object or behavior based on one's own criteria (Brophy, 1981; Henderlong & Lepper, 2002). When a parent or teacher says "Well done, that's a beautiful drawing!" to a child who has drawn a nice picture, it constitutes praise. What differentiates praise from the concept of "criticism" is its positive nature.

There are two distinct approaches regarding rewards and praise. The first of these is the behavioral approach. Although the foundations of rewards were laid by Ivan Pavlov and Edward Thorndike, it was popularized by Skinner (1971). The behavioral approach argues that rewards and praise have a positive impact on behavior and motivation (Cavanaugh, 2013). Karadaş (2020), in their doctoral thesis, found a positive relationship between rewards and academic achievement. Meta-analyses conducted by Cameron and Pierce (1994) also support the idea that rewards positively affect motivation, not negatively. Similarly, studies in

<sup>1</sup>International Final University, Cyprus, ozgurbolat@gmail.com, orcid.org/0000-0003-4420-1368

Turkey by Yaman and Güven (2014) and Açıkgöz and Babaoğlan (2023) have found a positive relationship between rewards and motivation. However, it should also be noted that even researchers advocating for rewards have highlighted some of its negative aspects. For instance, children who do not receive rewards might argue that rewards are given to undeserving children (Yaman & Güven, 2014). This situation can potentially lead to competition and hostility among children.

The social-cognitive approach, on the other hand, views rewards and praise differently. The behavioral approach has been criticized for not taking individuals' cognitive processes into account (Chomsky, 1971). Especially the Self-Determination Theory argues that rewards and praise are often used as controlling mechanisms to make children do different tasks (Ryan & Deci, 2017). Two meta-analyses conducted by the founders of this theory found a negative relationship between rewards, praise, and motivation (Deci et al., 1999;2001). The main thesis of this approach is that while rewards can induce external motivation, they might have a negative impact on internal motivation (Gündüz & Balyer, 2011). A study that investigated parents' opinions about the reward system found that a majority of parents (67%) expressed that the use of rewards leads to negative outcomes (Kowalski & Froiland, 2020).

Recent studies have shed light on the reasons behind this difference. Rewards and praise, when controlling in nature, tend to decrease motivation, whereas when they provide informative feedback about skills, they can enhance motivation (Soenens & Vansteenkiste, 2020). Deci, Koestner, and Ryan (1999) found a negative relationship (-0.68) between rewards, praise, and motivation particularly in areas that interest children, as rewards and praise often do not provide feedback on the quality of the work or offer comments on skills. Rewards and praise can enhance motivation when they are informative. For example, if a child receives a reward for a drawing in a competition and interprets it as "I must be skilled at drawing to have received this reward," essentially emphasizing the skill, their motivation can increase. However, if a parent promises a reward for a child who doesn't complete their homework, the message of "you're skilled" doesn't come across, and in this case, the reward doesn't motivate. Conversely, because it exerts control, it diminishes the child's motivation to do homework. Even if a parent intends to use rewards and praise informatively, the child might perceive it as controlling, leading to decreased motivation (Ryan & Deci, 2022). For instance, in a study, researchers praised children with statements like "Well done. Very good. You're doing it just as you should," but due to the controlling language used, the children's motivation decreased (Ryan, 1982). Feedback, when informative, generally boosts motivation. However, when feedback is given in a controlling manner, it diminishes motivation because it takes away the child's sense of responsibility (Hattie & Timperley, 2007). In summary, what matters here is whether rewards and praise are controlling or informative in nature. Even if parents and teachers intend praise and rewards to be informative, children might perceive them as controlling. Therefore, it could be risky to use rewards and praise. A safe approach could be to offer informative feedback to children with making a judgement.

In the context of Turkey, Açıkgöz and Babaoğlan (2023) found that both teachers and parents frequently use rewards. The reward method is widely used in our education system (Gündüz & Balyer, 2011; Güzelyurt et al., 2019). In fact, as a result of their research, Açıkgöz and Babaoğlan (2023) made the following observation: "It can be inferred from the findings that all teachers and parents [in their sample] use the reward method" (p. 337). An alternative to the reward and praise system is providing loving support, clear expectations, creating a discussion environment (Jeynes, 2011; Osher et al., 2010). However, such methods are scarcely used in our context. The methods of play and giving responsibility to children are identified as the least used (Güzelyurt et al., 2019). Among the negative outcomes of the reward system, students working not for learning but for the reward, students bargaining for work, and the diminishing value of rewards over time have been expressed (Açıkgöz & Babaoğlan, 2023; Gündüz & Balyer, 2011). Babayığit and Erkuş (2017) noted in their study that especially symbolic rewards begin to lose their effectiveness after a certain period.

### **Parenting Styles and Reward and Praise Behaviors**

Parenting styles were initially defined by Baumrind (1971). Baumrind identified four distinct parenting styles. These four styles differ in two fundamental dimensions: demanding/control or responsiveness. The control dimension indicates how much power and control the parent has over the child (Barber et al., 2012; Grolnick, 2002). According to Self-Determination Theory, parenting styles are categorized into controlling parenting attitude and autonomy-supportive parenting attitude (Ryan & Deci, 2017). The controlling parenting attitude intervenes both in the child's behavior and their psychological world (Barber et al., 2012). An autonomy-supportive parent understands the child's emotions and perspectives, validates their feelings,

and offers choices (Reeve & Cheon, 2021; Ryan & Deci, 2017). An autonomy-supportive family does not dictate any behavior to the child and does not use controlling language. A literature review indicates that children of non-controlling families are better at taking risks, achieving academically, and maintaining mental well-being (Merlin et al., 2013). Controlling parents negatively affect children's motivation, and these children struggle with managing their emotions (Grolnick, 2002). Supporting autonomy positively impacts children in every aspect. Therefore, efforts made by teachers and school leaders to teach parents autonomy-supportive styles are of great importance for effective schooling.

Rewards and praise are considered as part of controlling parenting behavior according to Self-Determination Theory. According to this theory, families that use rewards and praise tend to exhibit controlling parenting behaviors. In the context of Turkey, it is indeed important to investigate whether rewards and praise truly represent an element of controlling parenting or a component of autonomy-supportive parenting. Based on these findings, efforts should be made to conduct parental involvement studies. However, to do this, it is essential to first discover the extent to which parents use reward and praise to motivate their children.

In the literature specific to the context of Turkey, there is a lack of a scale that measures parents' reward and praise behaviors. In the Turkish context, Atli et al. (2022) have developed a Parental Reward Scale. However, this scale measures reward from the child's perspective rather than parents'. In the international literature, there is only one scale that measures parents' reward behavior (Fabes et al., 1989). This scale measures reward behaviors unidimensionally. Rewards are bi-dimensional, which means it could be used as a control tool or a motivational tool. There is no scale available for measuring praise behavior. This research aims to fill this gap in the literature by separately measuring parents' reward and praise behaviors, and providing researchers and school leaders with a reliable and valid scale.

## METHOD

The purpose of this research is to develop two reliable and valid scales that measure parents' reward and praise behaviors. The research adopts a descriptive research model, and both scales have been developed concurrently. The first scale is the Parental Reward Behavior Scale, and the second is the Parental Praise Behavior Scale. Instead of publishing these scales separately, since the data were collected from the same sample, they have been published together as a single article. These scales measure behaviors, not attitudes.

### Study Group

Data was collected from two different parent groups. Nunally and Bernstein (1978) suggested that a sample size of 300-400 individuals is suitable for pilot testing. Sufficient data were collected to develop this scale. Ethical approval was obtained from the International Final University Scientific Research and Publication Ethics Board for this study with the reference no of 100/050/REK.001. Parents were sent an online link via social media. As the data were collected online, participants who provided incorrect answers to the control question, responded in less than one minute, and selected the same option for all four questions in a row were excluded from the analysis to enhance data reliability. The gender and age distribution of participants is presented in Tables 1 and 2. The number of participants in the study group differs for the two scales because the numbers of invalid data vary in two separate studies.

**Table 1**  
*Demographic Characteristics of the Praise Scale Study Groups*

	1 <sup>st</sup> Study Group		2 <sup>nd</sup> Study Group	
	n=(441)	%	n=(408)	%
<b>Gender</b>				
Female	385	91.4	359	96.5
Male	36	8.6	13	3.5
	<u>Avg.</u>	<u>Sd.</u>	<u>Avg.</u>	<u>Sd.</u>
<b>Age</b>	38.68	7.54	38.78	6.15

Twenty participants from the first study group and thirty-eight participants from the second group did not share their demographic information.

**Table 2**  
*Demographic Characteristics of the Reward Scale Study Groups*

	1 <sup>st</sup> Study Group		2 <sup>nd</sup> Study Group	
	n=(393)	%	n=(364)	%
<b>Gender</b>				
Female	346	92.5	324	96.7
Male	28	7.5	11	3.3
	<u>Avg.</u>	<u>Sd.</u>	<u>Avg.</u>	<u>Sd.</u>
<b>Age</b>	38.39	7.70	38.80	6.02

Nineteen participants from the first study group and twenty-nine participants from the second study group did not share their demographic information.

**Data Collection Process**

In this scale development study, parents' reward and praise behaviors were measured. Following a detailed literature review, 32 items were drafted for use in the scale. Subsequently, the items were discussed with a team of three experts (Associate Professor, PhD Lecturer, and the Author of the Study). After the discussion, a new 25-item version of the scale was created. Parents were asked about the frequency of their praise/reward behaviors. The response options were presented as follows: never (1), sometimes (2), occasionally (3), often (4), and always (5).

**FINDINGS AND ANALYSIS**

Mplus version 8.7 (Muthen & Muthen, 1998-2017) was used for analysis. In the first round, a parallel analysis method was used to conduct Exploratory Factor Analysis (CFA). The initial set of 25 items was reduced to 15 items (8 reward items, 7 praise items) through the parallel analysis. Subsequently, Exploratory Factor Analysis (EFA) using the geomin method was performed to determine the factor structure and test relationships among the items. Geomin is one of the oblique rotation techniques (Hattori et al., 2017). The Kaiser-Guttman rule (Guttman, 1954; Kaiser, 1960) was used to determine the factor structure, considering eigenvalues greater than 1 as the criterion. The emerged structure aligned with our theoretical expectations. For factor-item relationships, a criterion of absolute value greater than .40 was used (Matsunaga, 2010). The model-data fit statistics of the EFA conducted with data from the first study group are presented in Table 3 and Table 4.

**Table 3. Exploratory Factor Analysis Model-Data Fit Statistics for the Praise Scale**

Model	Free Parameters	X <sup>2</sup>	Degrees of Freedom	P-value	RMSEA	RMSEA %90 confidence level	CFI	TLI	SRMR
1 factor solution	7	56.876	14	<.001	.083	[.062, .107]	.990	.986	.027

**Table 4. Exploratory Factor Analysis Model-Data Fit Statistics for the Reward Scale**

Model	Free Parameters	X <sup>2</sup>	Degrees of Freedom	P-value	RMSEA	RMSEA %90 confidence level	CFI	TLI	SRMR
1 factor solution	8	350.14	20	<.001	.205	[.186, .224]	.919	.886	.110
2 factor solution	15	34.75	13	<.001	.065	[.039, .092]	.995	.988	.023

In the assessment of data fit, an RMSEA value below .08 indicates a good fit between the model and the data (MacCallum et al., 1996). Additionally, CFI and TLI values above .95 and SRMR values below .08 are considered to represent a good model-data fit (Hu & Bentler, 1999). In this context, for the Praise Scale, an RMSEA of .083, CFI of .990, TLI of .986, and SRMR of .027 indicate a good model-data fit. For the Reward Scale, the single-factor solution did not fit the data well and was rejected (RMSEA = .205, CFI = .919, TLI = .886, SRMR = .110). However, the two-factor solution with an RMSEA of .065, CFI of .995, TLI of .988, and SRMR of .023 met the model-data fit criteria and aligned with the theoretical expectations. The results of the two-factor EFA conducted on data from the first study group and reliability evidence for the factors are summarized in Table 5 and Table 6.

**Table 5. Exploratory Factor Analysis Results for the Praise Scale**

Items	Factor Weight	
	Praise ( $\alpha.88$ )	
M1- I praise my child when they do a good job.	.823	
M2- If my child achieves something, I tell them that I am proud of them.	.593	
M3- I use praise to motivate my child.	.780	
M4- When my child behaves the way I want, I praise them.	.724	
M5- When my child shows good behavior, I praise them.	.871	
M6- While raising my child, I use the word "well done."	.734	
M7- I praise my child when they fulfill their responsibilities.	.744	

The eigenvalue for the factor is 4.396, and the total variance explained is 62%.

**Table 6. Exploratory Factor Analysis Results and Reliability for the Reward Scale**

Items	Factor Weight	
	Motivation ( $\alpha.81$ )	Control ( $\alpha.85$ )
M1 - I use rewards to instill proper behaviors in my child.	.687	.144
M2 - I motivate my child with rewards.	.660	.150
M3 - I use rewards to encourage my child towards good behaviors.	.828	-.020
M4 - I use rewards to make my child do what I want.	.088	.773
M5 - I use rewards to instill a sense of responsibility in my child.	.781	-.002
M6 - I promise rewards to my child to make them do what they should.	.282	.570
M7 - I promise rewards to my child to make them do things they don't want to do.	.003	.804
M8 - I use rewards to make my child do things I want.	-.036	.954

The eigenvalue for the first factor is 4.746, and for the second factor, it is 1.141. In the 2-factor solution, the total variance explanatory power is 73%.  $r_{f_1, f_2} = 0.589$

According to the findings presented in Table 5; the eigenvalue of the obtained single factor is 4.396, and this value is above 1. There are 7 items in the single factor. The factor loadings of the items range from .593 to .871. The total explained variance is 62%. In line with the theoretical framework, this single factor is named "praise." As for the findings presented in Table 6; the eigenvalue of the first factor is 4.746, and the eigenvalue of the second factor is 1.141. Both of these eigenvalues are above 1. There are 4 items in the first factor and 4 items in the second factor. The factor loadings for the first factor range from .570 to .954, and for the second factor, they range from .660 to .828. The total explained variance is 73%. Consistent with the theoretical framework, the first factor is labeled as "motivation," and the second factor is labeled as "control." In other words, parents can use rewards as either a motivation or control tool. Additionally, to estimate the reliability level of each factor score, Cronbach's  $\alpha$  was calculated by considering the items associated with each factor together. As a result of the reliability analysis,  $\alpha=.88$  for the praise scale,  $\alpha=.81$  for the motivation sub-dimension of the reward scale, and  $\alpha=.85$  for the control sub-dimension of the reward scale. A Cronbach's  $\alpha$  greater than .80 is presented as strong evidence of reliability (Cronbach, 1951).

Following the exploratory factor analysis, a confirmatory factor analysis (CFA) was conducted using the data obtained from the second group of parents. The findings of the CFA results are presented in Table 7 and Table 8.

**Table 7. Confirmatory Factor Analysis (CFA) Model-Data Fit Statistics for the Praise Scale**

Model	Free Parameters	X <sup>2</sup>	Degrees of Freedom	P-value	RMSEA	RMSEA %90 confidence level	CFI	TLI	SRMR
1 factor solution	49	110.89	14	<.001	.130	[.108, .153]	.983	.975	.028

**Table 8. Confirmatory Factor Analysis (CFA) Model-Data Fit Statistics for the Reward Scale**

Model	Free Parameters	X <sup>2</sup>	Degrees of Freedom	P-value	RMSEA	RMSEA %90 confidence level	CFI	TLI	SRMR
2 factor solution	56	135.05	19	<.001	.130	[.109, .151]	.982	.973	.029

In the examination of data fit, an RMSEA value below .08 indicates an acceptable degree of model-data fit (MacCallum et al., 1996). When both tables are examined, the RMSEA values are above the desired threshold (RMSEA=.130 and RMSEA=.130). However, when looking at the other three fit indices used to assess model-data fit (CFI=.983, TLI=.975, SRMR=.028 and CFI=.982, TLI=.973, SRMR=.029), they meet the predetermined criteria quite well, suggesting that the structure is confirmed. Furthermore, Hu and Bentler (1999) suggest that RMSEA values be too conservative in small samples. The Confirmatory Factor Analysis results for the Parental Reward and Praise Behavior Scale are presented in Table 9 and Table 10.

**Table 9. Confirmatory Factor Analysis Results for the Praise Scale**

Item	Standardized Factor Weight	Standard Deviation	t	p
<b>Praise (α0.89)</b>				
M1	.794	.020	40.435	<.001
M2	.740	.024	30.604	<.001
M3	.809	.018	44.516	<.001
M4	.684	.024	27.993	<.001
M5	.893	.013	70.433	<.001
M6	.689	.024	29.183	<.001
M7	.816	.019	42.998	<.001

**Table 10. Confirmatory Factor Analysis Results for the Reward Scale**

Item	Standardized Factor Weight	Standard Deviation	t	p
<b>Motivation (=α.87)</b>				
M1	.831	.018	46.73	<.001
M2	.798	.020	39.03	<.001
M3	.879	.017	50.86	<.001
M5	.847	.017	49.67	<.001
<b>Control (=α.89)</b>				
M4	.865	.019	45.33	<.001
M6	.853	.019	43.78	<.001
M7	.838	.022	38.32	<.001
M8	.917	.014	66.26	<.001

According to the data presented in Table 9, factor loadings for the first factor range between .684 and .893. Additionally, the Cronbach's α value is .89. As for the data provided in Table 10, for the "motivation" factor of the reward scale, factor loadings range from .798 to .879, while for the "control" factor, factor loadings

vary between .838 and .917. Furthermore, Cronbach's  $\alpha$  values are .87 for the first factor (motivation) and .89 for the second factor (control). The relationship between the two factors is positive, with a Cronbach's Alpha value of .66. Thus, the analysis of the data obtained from the second study group provides both validity and reliability evidence.

In addition to the scale, two more scales were administered simultaneously to the participants of the second study group: the Criticism Scale and the Disrespect Scale. The Criticism Scale consists of a single item and has been reliably and validly used in previous research (Gunderson et al., 2018). The single item developed for children was adapted for parents in this study. The statement "I criticize my child when they cannot do something well/correctly" was provided, and participants were asked to what extent it reflects their behavior. The Disrespect Scale consists of 8 items ( $\alpha=.71$ ) and is commonly used in the literature (Barber et al. 2012). The wording of items were changed for parents. Two sample items are as follows: "I violate my child's privacy" and "I embarrass my child in public." Both scales used a 5-point Likert-type response format, ranging from 1 (does not reflect me at all) to 5 (completely reflects me).

**Table 11. Findings on Concurrent Validity of the Reward and Praise Scale**

	Criticism Scale	Disrespect Scale
<b>Reward Factor 1 - Control</b>	0.30**	0.37***
<b>Reward Factor 2 - Motivation</b>	0.36***	0.25**
<b>Praise Scale</b>	0.33***	0.30**

*\*p<.05, \*\*p<.01, \*\*\*p<.001;  $\alpha$  = Cronbach's Alpha*

Correlation analysis was conducted to obtain evidence of concurrent validity. The results showed positive relationships between the reward-control subscale and the "criticism scale" ( $r=0.25$ ) and the "disrespect scale" ( $r=0.41$ ). Additionally, positive relationships were found between the reward-motivation subscale and the "criticism scale" ( $r=0.37$ ) as well as the "disrespect scale" ( $r=0.36$ ). Furthermore, the praise scale exhibited positive relationships with the "criticism scale" ( $r=0.33$ ) and the "disrespect scale" ( $r=0.30$ ). In conclusion, through analyses conducted using data from two distinct study groups, evidence of validity and reliability was obtained for the "Parental Reward Behavior Scale" and the "Parental Praise Behavior Scale," both consisting of 15 items and proven to be valid and reliable.

## DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

The purpose of this study is to develop a reliable and valid scale for measuring parental reward and praise behaviors to be used in parental involvement. In this study, two separate scales were developed in parallel. The first one is the "Parental Reward Behavior Scale," and the other is the "Parental Praise Behavior Scale." The constructed scales in this research demonstrate satisfactory structural validity, concurrent validity, and internal consistency reliability. The Parental Reward Behavior Scale consists of two distinct factors named "motivation" and "control." The Parental Praise Behavior Scale consists of a single factor. The structure identified through exploratory factor analysis was further confirmed through confirmatory factor analysis. Adequate reliability evidence was also presented. The scales can be used separately or together by researchers, school leaders and teachers.

The Parental Reward Behavior Scale consists of two factors, each with four items. The scale study clearly shows that parents use rewards as both a means of control and a motivational tool. This finding is consistent with the literature. According to Self-Determination Theory (Ryan & Deci, 2022), rewards are motivating when they provide information about a child's behavior and controlling when used to manipulate the child's behavior (Deci et al., 1999). The scale items clearly reflect this distinction. For instance, items in the "control" subscale (e.g., "I use rewards to make my child do what I want.") directly capture this controlling parental behavior. Similarly, the "motivation" subscale (e.g., "I motivate my child with rewards.") reflects parents' motivational intentions. In this sense, the scale accurately captures the theoretical distinction found in the literature. Therefore, it contributes both theoretically to the field and serves as a valid and reliable measurement tool.

In the context of Turkey, there was no existing scale measuring parents' reward behaviors in the literature. While there is a scale measuring parents' reward behaviors (Atli et al., 2022), it focuses on the child's perspective. Therefore, this scale contributes significantly to the field. In the international literature, there is a scale measuring parental reward behaviors (Fabes et al., 1989). However, this scale does not differentiate

between the concepts of "motivation" and "control." Moreover, the scale measures reward behavior in a general sense, focusing on activity-based rewards. An example item reads: "I give my child money when they help with household chores." This limits the applicability of the scale based on the child's age, as this item might not be suitable for a child under the age of 8. Rewards are often used in preschool settings in Turkey (Güzelyurt et al., 2019). The scale developed in this research is suitable for all ages and distinguishes between control and motivation, making it applicable to different theoretical frameworks.

In addition to contributing to scale development, this research also makes theoretical contributions to the field. Alongside the development of the two scales, the Concurrent Validity of the scales was assessed using the Criticism Scale and the Disrespect Scale. Both the reward scale and the praise scale exhibit positive relationships with these two measures. According to behavioral theories, these relationships should be negative. However, these findings are consistent with the claims of Self-Determination Theory (Ryan & Deci, 2022). Parents who provide rewards and praise to their children also tend to criticize them and show more disrespect. This finding is in line with the observation by Newby (1991), who found that teachers who provide rewards are also more likely to give punishments.

### **Conclusion**

In the Turkish context, the scale developed by Atli et al. (2022) to measure praise behaviors contains items that are in the same factor as warm parent-child relationship items. For example, items measuring warm family relationships like "kisses me" and "hugs me" are in the same factor as praise items like "Well done!" or "Bravo!" However, this research has demonstrated that parents who give praise also tend to criticize and show more disrespect to their children. The current research demonstrates that praise is not a part of a warm relationship, but a disrespecting relationship. Similarly, in the international literature, there are scales where rewards and praise are considered components of positive parenting. For instance, two items from the Positive Parenting dimension of the widely used Alabama Parenting Questionnaire include reward and praise items: ("I give my child rewards or extra things when they listen to me or behave well," "I praise my child when they behave well.") However, this research has shown that these behaviors are associated with negative parenting behavior. Especially in Turkey, where parents frequently use rewards (Güzelyurt et al., 2019), this research could contribute to changing these thought patterns.

### **Limitations of the Study**

The limitations of the study can be outlined as follows: One limitation of the research is that it measures the behavior dimensions of parents. Additionally, there is a need for a scale that can measure parents' attitudes. Attitude and behavior scales should be used separately, and the reasons for the differences between them should be explored. The data for the research were collected through self-report measures. This may not directly reflect parents' actual behaviors. Therefore, observation or experimental methods should be employed in different research designs to validate this information. The research was conducted online. The findings should be confirmed through face-to-face settings.

### **Recommendations**

Researchers should examine the dimensions of control and motivation of reward and praise in more detail using different measurement tools, and they should investigate the contribution of these parenting behaviors to the emotional, social, and cognitive development of children. School administrators should explore parents' reward and praise behaviors before designing parent involvement programs and base these programs on these findings. In conclusion, to address these needs, the Parent Reward Behavior Scale and the Parent Praise Behavior Scale have been developed and made available for use by educational leaders and teachers in parent involvement initiatives.

### **Declarations**

**Conflict of Interest:** No potential conflicts of interest were disclosed by the author with respect to the research, authorship, or publication of this article.

**Ethics Approval:** The formal ethics approval was granted by the Social and Human Sciences Research and Publication Ethics Committee of International Final University with a reference number 140/100/015. We conducted the study in accordance with the Helsinki Declaration in 1975.

**Funding:** No specific grant was given to this research by funding organizations in the public, commercial, or not-for-profit sectors.



**Research and Publication Ethics Statement:** Hereby, we as the authors consciously assure that for the manuscript “Developing a Scale to Measure Parents’ Reward and Praise Behaviors For Parental Involvement,” the following is fulfilled:

- This material is the authors' own original work, which has not been previously published elsewhere.
- The paper reflects the authors' own research and analysis in a truthful and complete manner.
- The results are appropriately placed in the context of prior and existing research.
- All sources used are properly disclosed.

**Acknowledgment:** I would like to express my gratitude to Dr. Sungur Gürel, Associate Professor, for his assistance during data analysis.

**Note:** The Parent Reward Behavior Scale and Parent Praise Behavior Scale is open to use by all researchers and practitioners. There is no need to obtain permission from the author as long as it is used for research purposes.

## REFERENCES

- Açıköz, B., & Babaoğlu, E. (2023). Öğrencilere verilen ödüllerin etkililiğine ilişkin öğretmen ve veli görüşleri. [Teacher and parent opinions on the effectiveness of the rewards given to students.] *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (65), 330-360. <https://doi.org/10.21764/maeuefd.1108858>
- Atli, A., Sad, S. N., & Ozer, N. (2022). A mixed methods approach to developing a scale on parents' practices to reward & punish their children. *Research in Pedagogy*, 12(2), 339-344.
- Babayigit, Ö., & Erkuş, B. (2017). Sınıf öğretmenlerinin derslerde kullandıkları pekiştirici ve cezaların etkililiği. [The effectiveness of the reinforcers and punishments used by classroom teachers in their lessons.] *Kastamonu Eğitim Dergisi*, 25(2), 567-580.
- Barber, B. K., Xia, M., Olsen, J. A., McNeely, C. A., & Bose, K. (2012). Feeling disrespected by parents: Refining the measurement and understanding of psychological control. *Journal of Adolescence*, 35(2), 273-287. <https://doi.org/10.1016/j.adolescence.2011.10.010>
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental psychology*, 4(1p2), 1. <https://psycnet.apa.org/doi/10.1037/h0030372>
- Bolat, Ö. (2016). *Beni Ödülle Cezalandırma: Mutlu ve başarılı çocuk yetiştirmek için rehber*. [Do not punish me with rewards.] Doğan Kitap.
- Brophy, J. (1981). Teacher praise: A functional analysis. *Review of educational research*, 51(1), 5-32. <https://doi.org/10.3102/00346543051001005>
- Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analysis. *Review of Educational Research*, 64(3), 363-423. <https://doi.org/10.3102/00346543064003363>
- Cavanaugh, B. J. (2013). *Implementation science and preventive behavioral supports in schools*. The University of Maine.
- Chomsky, N. (1971). *The case against BF Skinner*. The New York Review of Books, 17(11), 18-24.
- Christensen, K.M., Hagler, M.A., Stams, G.J. vd. Non-Specific versus Targeted Approaches to Youth Mentoring: A Follow-up Meta-analysis. *J Youth Adolescence* 49, 959–972 (2020). <https://doi.org/10.1007/s10964-020-01233-x>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334. <https://doi.org/10.1007/BF02310555>
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627. <https://psycnet.apa.org/doi/10.1037/0033-2909.125.6.627>
- Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of educational research*, 71(1), 1-27. <https://doi.org/10.3102/00346543071001001>
- DeVellis, R. F. (2017). *Scale Development: Theory and Applications* (4th ed.). Sage.
- Erbaş, D., & Özkan, Ş. Y. (2017). Uygulamalı davranış analizi. [Applied behaviour analysis]. *Pegem Atıf İndeksi*, 001-555.
- Fabes, R.A., Fultz, J., Eisenberg, N., Plumlee, T.M., & Christopher, F.S. (1989). The effects of rewards on children's prosocial motivation: A socialization study. *Developmental Psychology*, 25, 509-515. <https://psycnet.apa.org/doi/10.1037/0012-1649.25.4.509>
- Grolnick, W. S. (2002). *The psychology of parental control: How well-meant parenting backfires*. Psychology Press.
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143. <https://psycnet.apa.org/doi/10.1037/0022-0663.81.2.143>
- Gunderson, E. A., Donnellan, M. B., Robins, R. W., & Trzesniewski, K. H. (2018). The specificity of parenting effects: Differential relations of parent praise and criticism to children's theories of intelligence and learning goals. *Journal of Experimental Child Psychology*, 173, 116-135. <https://doi.org/10.1016/j.jecp.2018.03.015>

- Gündüz, Y., & Balyer, A. (2011). Eğitimde ödül ile cezanın yeri ve buna ilişkin alternatif yaklaşımlar. [The place of reward and punishment in education and alternative approaches related to this.]. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*; 2(40), 10-23.
- Guttman, L. (1954). Some necessary conditions for common-factor analysis. *Psychometrika*, 19(2), 149-161. <https://doi.org/10.1007/BF02289162>
- Güzelyurt, T., Tok, F., Tümas, Ç., & Uruğ, Ş. (2019). Okul öncesi öğretmenlerinin ödül ve ceza kullanımına ilişkin görüşleri. [Preschool teachers' opinions on the use of rewards and punishments.] *Temel Eğitim*, 1(4), 21-28.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112. <https://doi.org/10.3102/003465430298487>
- Hattori, M., Zhang, G., & Preacher, K. J. (2017). Multiple local solutions and geomin rotation. *Multivariate Behavioral Research*, 52(6), 720-731. <https://doi.org/10.1080/00273171.2017.1361312>
- Henderlong, J., & Lepper, M. R. (2002). The effects of praise on children's intrinsic motivation: a review and synthesis. *Psychological Bulletin*, 128(5), 774. <https://psycnet.apa.org/doi/10.1037/0033-2909.128.5.774>
- Horner, R. H., & Sugai, G. (2015). School-wide PBIS: An example of applied behavior analysis implemented at a scale of social importance. *Behavior Analysis in Practice*, 8, 80-85. <https://doi.org/10.1007/s40617-015-0045-4>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Jeynes, W. H. (2011). Parental involvement research: Moving to the next level. *School Community Journal*, 21(1), 9.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational And Psychological Measurement*, 20(1), 141-151. <https://doi.org/10.1177/001316446002000116>
- Karadaş, C. (2020). *Anne-babaların kullandıkları ödül-ceza yöntemlerinin çocuklarının akademik başarıları üzerindeki etkisi: akademik erteleme ve ders çalışma süresinin aracılık rolü. [The impact of the reward-punishment methods used by parents on their children's academic achievements: the mediating role of academic procrastination and study time].* (Yayımlanmamış Doktora Tezi). İnönü Üniversitesi, Malatya.
- Kowalski, M. J., & Froiland, J. M. (2020). Parent perceptions of elementary classroom management systems and their children's motivational and emotional responses. *Social Psychology of Education*, 23(2), 433-448. <https://doi.org/10.1007/s11218-020-09543-5>
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130. <https://doi.org/10.1037/1082-989X.1.2.130>
- Matsunaga, M. (2010). How to Factor-Analyze Your Data Right: Do's, Don'ts, and How-To's. *International Journal of Psychological Research*, 3(1), 97-110. <https://doi.org/10.21500/20112084.854>
- Merlin, C., Okerson, J. R., & Hess, P. (2013). How parenting style influences children: a review of controlling, guiding, and permitting parenting styles on children's behavior, risk-taking, mental health, and academic achievement. *The William & Mary Educational Review*, 2(1), 14.
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide. Eighth edition.* Muthén & Muthén.
- Newby, T. J. (1991). Classroom motivation: Strategies of first-year teachers. *Journal of Educational Psychology*, 83(2), 195. <https://psycnet.apa.org/doi/10.1037/0022-0663.83.2.195>
- Ng, J., Xiong, Y., Qu, Y., Cheung, C., Ng, F. F. Y., Wang, M., & Pomerantz, E. M. (2019). Implications of Chinese and American mothers' goals for children's emotional distress. *Developmental Psychology*, 55(12), 2616. <https://psycnet.apa.org/doi/10.1037/dev0000834>
- Nunally, J. C., & Bernstein, I. (1978). *Psychometric Theory.* McGraw.
- Osher, D., Bear, G.G., Sprague, J.R. & Doyle, W. (2010) How can we improve school discipline?, *Educational Researcher*, 39(1), 48-58. <https://doi.org/10.3102/0013189X09357618>
- Otterpohl, N., Lazar, R., & Stiensmeier-Pelster, J. (2019). The dark side of perceived positive regard: When parents' well-intended motivation strategies increase students' test anxiety. *Contemporary Educational Psychology*, 56, 79-90. <https://doi.org/10.1016/j.cedpsych.2018.11.002>
- Reeve, J., & Cheon, S. H. (2021). Autonomy-supportive teaching: Its malleability, benefits, and potential to improve educational practice. *Educational Psychologist*, 56(1), 54-77. <https://doi.org/10.1080/00461520.2020.1862657>
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450-461. <https://psycnet.apa.org/doi/10.1037/0022-3514.43.3.450>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness.* Guilford Publications.
- Ryan, R. M., & Deci, E. L. (2022). Self-determination theory. In *Encyclopedia of quality of life and well-being research* (pp. 1-7). Springer International Publishing.
- Ryan, R. M., & Deci, E. L. (2022). Self-determination theory. In *Encyclopedia of quality of life and well-being research* (pp. 1-7). Springer International Publishing.
- Skinner, B. F. (1971). Operant conditioning. *The encyclopedia of education*, 7, 29-33.

- Soenens, B., & Vansteenkiste, M. (2020). Taking adolescents' agency in socialization seriously: The role of appraisals and cognitive-behavioral responses in autonomy-relevant parenting. *New Directions For Child and Adolescent Development*, 2020(173), 7-26. <https://doi.org/10.1002/cad.20370>
- Wouters, S., Colpin, H., Luyckx, K., & Verschueren, K. (2018). Explaining the relationship between parenting and internalizing symptoms: The role of self-esteem level and contingency. *Journal of Child and Family Studies*, 27, 3402-3412. <https://doi.org/10.1007/s10826-018-1167-4>
- Yaman, E., & Güven, N. (2014). Öğrencilerin motivasyon düzeyine etki eden önemli bir kavram: Ödül ve ceza. [An important concept that affects students' motivation level: Reward and punishment]. *International Journal of Human Sciences*, 11(1), 1163-1177.

**Items of the Parental Praise Behavior and Parental Reward Behavior Scales (Turkish):**

Faktör	Maddeler
Övgü	M1- Çocuğum iyi bir iş yaptığında, onu överim.
Övgü	M2- Çocuğum bir başarı gösterirse, onunla gurur duyduğumu söylerim.
Övgü	M3- Çocuğumu motive etmek için övgüyü kullanırım.
Övgü	M4- Çocuğum istediğim gibi davrandığında, onu överim.
Övgü	M5- Çocuğumun güzel davranışlar gösterdiğinde, onu överim.
Övgü	M6- Çocuğumu yetiştirirken, aferin sözünü kullanırım.
Övgü	M7- Çocuğum sorumluluklarını yerine getirdiğinde, onu överim.
Ödül- Motivasyon	M1- Çocuğuma doğru davranışları kazandırmak için, ödül kullanırım.
Ödül- Motivasyon	M2- Çocuğumu ödül ile motive ederim.
Ödül- Motivasyon	M3- Çocuğuma güzel davranışlara özendirmek için ödül kullanırım.
Ödül- Kontrol	M4- Çocuğum istediğimi yapsın diye ödül kullanırım.
Ödül- Motivasyon	M5- Çocuğuma sorumluluk kazandırmak için ödül kullanırım.
Ödül- Kontrol	M6- Çocuğuma yapması gerekenleri yapması için ödül vaat ederim.
Ödül- Kontrol	M7- İstemediği şeyleri yapmaları için, çocuğuma ödül vaat ederim.
Ödül- Kontrol	M8- Çocuğum istediğim şeyleri yapsın diye ödül kullanırım.