

Developing a Scale to Measure Teacher's Reward and Praise Behaviors for Classroom Management

Özgür Bolat¹

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Abstract

Classroom management is a crucial factor in creating an effective learning environment. In a classroom with poor management, students cannot engage in the learning process and may experience anxiety. Therefore, equipping teachers with effective classroom management skills is among the responsibilities of school leaders. However, prior to offering professional development programmes, school leaders should first explore how teachers are managing their classrooms. Two of the most important tools teachers use for effective classroom management are rewards and praise. However, according to the Self-Determination Theory, although rewards and praise are effective in establishing discipline, they may not significantly enhance students' motivation. Therefore, it is imperative to measure how often rewards and praise teachers employ in their classrooms in a valid and reliable manner. To the best of our knowledge, no scale currently exists in the literature that measures this aspect. This research will be the first study to measure teachers' reward and praise behaviors. The research is conducted as a quantitative study using a descriptive survey model. In the initial round, a 25-item pilot form was administered to 465 teachers. The results of Exploratory Factor Analysis revealed a 13-item, 2-factor structure, explaining 76% of the total variance, named as "teacher praise behaviors" and "teacher reward behaviors," respectively. The reliability levels of the factor scores were found to be .87 and .92. In the second round, data were collected from 271 teachers using the 13-item form. Confirmatory Factor Analysis confirmed the 2-factor structure. To test concurrent validity, two scales were administered, and their relationships were presented as evidence of concurrent validity. In conclusion, the Teacher Reward and Praise Scale has been presented as a valid and reliable instrument for measuring teachers' behaviors in classroom management, available for researchers and practitioners' use.

Keywords: Classroom management, reward, praise, educational leadership, scale development

¹  ozgurbolat@gmail.com, Department of Educational Sciences, Fıncal International University

Introduction

Teacher's classroom management skill is widely acknowledged as the most effective way to create a conducive learning environment. In fact, without effective classroom management, it is nearly impossible for a teacher to establish an effective learning environment (Marzano, Marzano, & Pickering, 2003). In a poorly managed classroom, both effective teaching and learning processes fail (Jones & Jones, 2012). Research has demonstrated that classroom management plays a crucial role in enhancing the overall quality of education (Akgün, Yazar, & Dinçer, 2011; Korpershoek, Harms, de Boer, van Kuijk, & Doolaard, 2016) and significantly influences student outcomes (see Manley, Tu, Reardon, & Creswell, 2023). A meta-analysis conducted by Korpershoek et al. (2016) clearly revealed a positive relationship between classroom management and student outcomes. However, regrettably, classroom management remains one of the most challenging aspects of education for teachers (Pigge & Marso, 1997; Lewis, Romi, Katz & Qui, 2008). According to the study conducted by Dağlı and Han (2017), the most prevalent issue that teachers encounter in classrooms concerns students' problematic behavior. Due to the challenges faced in classroom management, teachers often experience stress (Freiberg, Oviatt & Naveira, 2020) and burnout (Brouwers & Tomic, 2000; Friedman & Farber, 1992). Consequently, research on classroom management has seen a significant increase in recent times. Bozkuş (2021) examined studies on classroom management conducted between 1980 and 2019 and found that 38% of these studies were conducted within the last five years. In summary, classroom management stands as one of the most crucial determinants of educational quality and deserves considerable attention and emphasis.

Despite the existence of various definitions of classroom management (Oliver, Wehby & Reschly, 2011), leading figures in the field, Evertson and Weinstein (2006) define it as any teacher action that supports and facilitates academic and social learning. Effective classroom management, in essence, serves two primary purposes. The first is to establish order in the classroom and prevent disruptive student behaviors. The second is to foster the development of students (e.g., social, emotional, moral, cognitive development) (Brophy, 2006; Doyle, 1986; Öztürk & Gangal, 2016; Wubbels, 2011). Brophy (2006) also refers to these two purposes as "discipline" and "socialization" processes. Being aware of this distinction is essential. A method employed by the teacher to ensure discipline may indeed maintain order, but it may not enhance and even thwarts student's development and socialization.

There are different approaches to classroom management. Among the six approaches proposed by Evertson and Weinstein (2006), two are particularly significant (Wubbels, 2011) and have received more research attention: "behavioral" and "internal control". Erdoğan (2003) recommends two approaches among others: reactive and preventive. The reactive approach reflects a behavioral approach and the preventive approach reflects a cognitive approach. Within the internal control approach, teacher aims to develop students' self-regulation so that students manage themselves. The reactive approach, as the name suggests, teacher reacts to student (mis)behaviour and tries to control them in order to create a quite environment. The behavioral approach uses conditioning to increase desired behavior or extinguish undesirable behavior. For instance, methods such as rewards, praise, point systems, or credit systems can be used to increase desired behaviors, while techniques like punishment or extinguishes undesired behaviors (Arın, Tunçer & Demir, 2016; Brophy, 2006). The internal control approach aims to support students to internalize values (Elias & Schwab, 2006). In recent years, particularly thanks to studies drawing "Self-Determination Theory" (Ryan & Deci, 2017), there has been a transition from the behavioral approach to the internal approach (Wubbels, 2011).

Two different approaches mentioned above ("behavioral" and "internal control") have distinct perspectives on rewards and praise. The behavioral approach advocates for the use of rewards and praise, whereas the internal control approach views them as controlling mechanisms. According to the behavioral approach, behavior is clearly defined, taught to students, and when they display the desired behavior, they are rewarded (Horner & Sugai, 2015). Of course, in some cases, if a student does not exhibit the desired behavior, they may receive punishment. Kazdin (2017) argues that a reward-based system in the classroom is an effective classroom management strategy. Similarly, praise, especially behavior-specific praise, is recommended as an effective classroom management technique with empirical evidence to support its effectiveness (Royer, Lane, Dunlap, & Ennis, 2019). In fact, many researchers who advocate for the behavioral approach have developed different school programs that incorporate praise systems into the classroom management process. However, a methodologically robust analysis has found no evidence to support the effectiveness of reward-based programs (Maggin, Chafouleas, Goddard & Johnson, 2011). Maggin et al. (2011) attribute the previous studies' findings of the effectiveness of reward systems to the use of insufficiently robust statistical methods in those studies.

According to the internal control-focused approach, rewards may be effective, but their impact is often short-lived, and sometimes they have no effect at all (Han & Altunhan, 2022; Yaman & Güven, 2014). Various meta-analysis studies have shown that internal control-focused, social, and emotional learning development programs help reduce student problems, enhance social skills, and improve academic achievement (Taylor, Oberle, Durlak & Weissberg, 2017). These classes are student-centered, allowing students to share responsibility and control, which fosters internal discipline (Freiberg & Lamb, 2009).

The internal control-focused approach is advocated by the "Self-Determination Theory" (Ryan & Deci, 2017). According to the "Self-Determination Theory," rewards and praise are considered a control system based on external motivation rather than internal motivation (Kowalski & Froiland, 2020). Rewards and praise are considered part of a controlling teacher style (Su & Reeve, 2011). A teacher with a controlling style tries to shape students' behavior and emotions as they desire, giving them little choice and wanting everything in the classroom to be as they wish, asserting their authority. According to Ryan and Deci (2017), rewards and praise have negative effects on students let alone being effective. In fact, their meta-analysis found that rewards decrease internal motivation (Deci, Koestner & Ryan, 1999) because students perceive them as the reason for desired behavior. Furthermore, students fail to internalize the behavior (Ryan & Deci, 2017), leading to a decrease in internal motivation (Brophy, 2014). While rewards and praise may achieve the first goal of classroom management (discipline), they may not fulfill the second goal (development). Due to this, teachers may mistakenly believe that rewards and praise are effective. In the context of Turkey, rewards are frequently used (Güzelyurt, Fidan, Tümas & Şuhade, 2019). Furthermore, when examining the views of preschool teachers regarding the use of rewards and punishments, the majority of teachers stated that rewards and punishments can be used (Güzelyurt et al., 2019). In summary, rewards and praise are common classroom management approaches.

In order to conduct studies in the field of classroom management, the first step is to examine teachers' views and the frequency of teacher behavior in relation with rewards and praise. Classroom management development programs should be shaped based on these findings. However, upon reviewing the literature, no scale measuring teachers' reward and praise behaviors has been found. This scale development study, to the best of my knowledge, will be the first of its kind and will be used to measure teachers' reward and praise behaviors. The purpose of this research is to develop a reliable and valid scale that measures teachers' reward and praise behaviors accurately.

Methodology

The current research is a scale development study, which employs a descriptive, quantitative research model. The purpose of this study is to develop a valid and reliable measurement tool to assess teachers' reward and praise behaviors in classroom management.

Participants

The data used in the research were collected from two different groups of teachers. The first group consists of 465 teachers working at the K-12 level, while the second group includes 271 teachers also working at the K-12 level. A convenience sampling strategy was used because of its practicality and accessibility (Bryman, 2016). An online link was created and posted on a social media account. According to the scale development process, it is recommended to reach five times the number of items in the trial form for the sample size (Yurdabakan & Çüm, 2017). Therefore, the sample size was considered adequate for scale development. This study received ethical approval from the International Final University Scientific Research and Publication Ethics Board with a reference no of 100/050/REK.001 on the date of 16.07.2023. The demographics are presented in Table 1.

Table 1.
Demographic Characteristics of the Study Groups

	First Group		Second Group	
	n (465)	%	n (271)	%
Gender				
Female	323	70.6	239	95.6
Male	134	29.4	11	4.4
Grade				
Preschool	66	14.4	30	12.0
Primary	139	30.3	62	24.8
School				
Middle School	153	33.3	73	29.2
High School	101	22.0	85	34.0
	Avg.	Sd.	Avg.	Sd.
Age	25.9	9.1	28.4	5.5

Notes: Eight participants from the first group and twenty-one participants from the second group did not share their demographic information.

Data Collection

In this scale development study, two constructs, reward and praise, were measured. A comprehensive literature review was conducted on these two constructs. The author has previously written a book on the concept of rewards. The literature review was mostly based on the extensive material of that book (Bolat, 2016). There was no similar scale in the literature that could be read. Based on the literature review, 32 items were written by the author. Subsequently, these items were presented to a lecturer and an associate professor. The lecturer was an expert in evaluation and measurement. He was easily able to spot duplicate items and recommended to include as few items as possible. The associate professor was an expert in the field of educational sciences. Duplicate items were eliminated through a discussion. Two items were added on the recommendation of the associate professor. The new form consisted of 25 items. To ensure face validity and construct validity, four factors were predicted theoretically: praise as control, praise as motivation, reward as control and reward as motivation. As discussed below, only three factors emerged from analysis. Praise scale yielded only one factor unlike our prediction. The

scale was scored using a 5-point Likert-type scale. Participants were asked about the frequency of their reward/praise behaviors in the classroom, and the options were none (1), sometimes (2), occasionally (3), often (4), and always (5).

Findings and Analysis

Data for testing the psychometric properties of the scale was collected in two rounds, and various analyses were conducted. Mplus versiyon 8.7 (Muthen & Muthen, 1998; Muthen & Muthen, 2017) was used to analyze the data. Validity evidence is provided through a series of exploratory and confirmatory factor analysis, reliability evidence is provided through an evaluation of Cronbach’s alpha. Before conducting the traditional exploratory factor analysis (EFA), 12 out of 25 items were excluded using the parallel analysis approach after repeated EFA series with data from the first study group. Kaiser-Mayer-Olkin (KMO) test is performed to see if EFA can be applied to the data. KMO value was .934 that is above the common cutoff of .70 indicating that sample is adequate for EFA. Since response options are in ordinal nature, Weighted Least Square Mean and Variance Adjusted (WLSMV) estimator is employed in all of the factor analyses. WLSMV estimator is a robust estimator with non-normally distributed ordinal responses (Suh, 2015) Ultimately, EFA was performed using the geomin technique for oblique rotation to determine the factors (latent structure) over 13 items and to test the relationships among the items within the latent structure. To decide on the number of factors emerging from the EFA, the Kaiser-Guttman rule (Guttman, 1954; Kaiser, 1960) was used, which identified 2 factors with eigenvalues greater than 1 and aligned with the researcher’s theoretical expectations. Matsunaga’s (2010) criterion of an absolute value greater than .40 was used to determine the relationship between an item and its factor. When examining the model-data fit for solutions up to the 2-factor solution, it was found that the 2-factor solution provided a good model-data fit with an RMSEA of .076, CFI of .992, TLI of .988, and SRMR of .026, and adequately represented the data. An RMSEA value below .08 indicates an acceptable level of model-data fit (MacCallum, Browne & Sugawara, 1996). Additionally, CFI and TLI above .95 and SRMR below .08 are considered indicators of good model-data fit (Hu and Bentler, 1999). Furthermore, the 2-factor solution aligns with our theoretical expectations. The statistics for model-data fit resulting from the EFA conducted with data from the first study group are presented in Table 2.

Table 2.
Exploratory Factor Analysis Model-Data Fit Indices

Model	estimated free parameters	χ^2	Free parameters	P	RMSEA	RMSEA %90 confidence level	CFI	TLI	SRMR
One factor analysis	13	1488.2	65	<.001	.217	[.208, .227]	.919	.903	.140
Two factor analysis	25	194.9	53	<.001	.076	[.065, .087]	.992	.989	.026

*The results of the 2-factor exploratory factor analysis (EFA) conducted with data from the first study group and the reliability evidence for the factors are summarized in Table 3.

According to the findings presented in Table 3, the eigenvalues of the two factors are above 1, with the first factor having an eigenvalue of 7.454 and the second factor having an eigenvalue of 1.914. Six items are associated with the first factor, and seven items are associated with the second factor. The factor loadings for the items range from .564 to .933 for the first factor and from .556 to .931 for the second factor. The total explained variance is 76%. Based on the theoretical framework, the first factor is labeled as “praise,” and the second factor is labeled as “reward.”

Table 3.
Exploratory Factor Analysis Results and Reliability of the Teacher Reward and Praise Behavior Scale (2-factor solution)

Factor	Items	Factor Weight	
		1	2
(1) Praise	M1- I praise my students when they achieve success.	.660	.078
	M2- I use praise in the classroom to motivate my students.	.820	.004
	M3- I use praise to appreciate my students' efforts.	.933	-.142
	M5- I use praise to motivate my students.	.874	.040
	M8- I praise my student when they exhibit appropriate behaviors.	.836	-.013
	M13- I praise my student when they behave as I desire.	.564	.170
(2) Reward	M1- I give rewards to my students to encourage them to make more effort.	.002	.765
	M4- By rewarding successful work, I motivate my students.	.229	.556
	M5- I use rewards to motivate my students.	.145	.853
	M6- I use rewards while educating my students.	.104	.901
	M10- I utilize a reward system to prevent undesirable behaviors.	-.009	.839
	M11- I promise rewards to my students to encourage them to work harder.	-.005	.745
	M12- I use rewards to instill correct behaviors in my students.	-.049	.911

The eigenvalue for the first factor is 7.454, and for the second factor, it is 1.914. In the 2-factor solution, the total variance explained is 76%. $r_{f_1, f_2} = .576$, $N = 465$, $\alpha_{praise} = .92$, $\alpha_{reward} = .87$

Additionally, to estimate the reliability level of each factor score, the items related to each factor were considered together, and Cronbach's alpha (Cronbach, 1951) was calculated. A Cronbach's alpha greater than .70 is considered acceptable reliability, greater than .80 indicates good reliability, and greater than .90 indicates very good reliability. As a result of the reliability analysis, Cronbach's alpha was calculated as .92 for the "praise" factor and .87 for the "reward" factor. It was concluded that each factor score is both acceptable and has good reliability.

To provide additional evidence for the construct validity of the measurement tool with the factor structure established through exploratory factor analysis, confirmatory factor analysis (CFA) was conducted using the data obtained from the second study group, consisting of 271 teachers. The purpose here was to determine how well the data from another sample within the same population fit the established factor structure (model) and to assess the adequacy of the factors in explaining the structure (DeVellis, 2017). The findings of the conducted CFA are presented in Table 4.

Table 4.
Summary of Confirmatory Factor Analysis Model-Data Fit Indices

Model	Estimated free parameters	χ^2	Free parameters	P	RMSEA	RMSEA %90 confidence level	CFI	TLI	SRMR
Two factor model	66	173.3	64	<.001	.079	[.065, .094]	.991	.989	.038

When examining the goodness-of-fit statistics in Table 4, it can be observed that the fit indices are as follows: RMSEA = .079, CFI = .991, TLI = .989, and SRMR = .038. These fit indices fall within the range of good-acceptable threshold values. In the final stage, the two-factor structure discovered from the data of the first study group was confirmed through confirmatory factor analysis (CFA) without further modification. The results of the Confirmatory Factor Analysis for the Teacher Reward and Praise Behavior Scale are presented in Table 5.

Table 5.
Confirmatory Factor Analysis Results for the Teacher Reward and Praise Behavior Scale

Factor	Item	Standardized Factor Weight	Standardized Error	t	p
(1) Praise	M1	.883	.016	55.45	<.001
	M2	.954	.009	104.42	<.001
	M3	.836	.017	49.55	<.001
	M4	.884	.017	52.24	<.001
	M5	.827	.019	42.52	<.001
	M6	.718	.030	23.91	<.001
(2) Reward	M7	.901	.013	70.85	<.001
	M8	.768	.027	28.19	<.001
	M9	.957	.008	120.49	<.001
	M10	.917	.011	80.67	<.001
	M11	.662	.035	18.88	<.001
	M12	.798	.021	37.26	<.001
	M13	.846	.019	45.73	<.001

According to the data presented in Table 5, the factor loadings for the first factor (praise) range from .71 to .95, and for the second factor (reward), they range from .66 to .95. Furthermore, Cronbach’s alpha values for the first factor (praise) and the second factor (reward) are found to be .91 each. Each factor can be considered to have very good reliability. The relationship between the two factors is positive, and the correlation is 0.42. Thus, through the analysis of the data obtained from the second study group, both validity and reliability evidence have been provided.

Finally, the criterion-related validity of the Teacher Reward and Praise Behavior Scale, for which validity and reliability evidence was obtained through both EFA and CFA, was tested using correlation analysis with other variables based on the data from the second study group. In this study, to examine the concurrent validity of the scale, the relationships between its sub-dimensions (reward and praise) and conceptually related constructs were analyzed using correlation analysis with two other scales (Christensen, Johnson & Turner 2020; DeVellis, 2017). To test concurrent validity, two scales conceptually related to the sub-dimensions of the Teacher Reward and Praise Behavior Scale were used in correlation analysis.

In the second study group, participants were administered two additional scales concurrently with the Teacher Reward and Praise Behavior Scale. The Subscale of Verbal Emotional Punishment from the Parent Reward and Punishment Scale developed by Atli, Sad & Ozer (2022) was used. Although the items in this scale were originally written for parents, they were adapted for the classroom environment in this research. The 4-item scale has a Cronbach's Alpha value of .60. The reason for using this scale is that teachers who use rewards also tend to use punishments (Newby, 1991) because both are control mechanisms. The second additional scale was the High Parental Expectation subscale from the

Perfectionism Scale developed by Frost, Marten, Lahart & Rosenblate (1990), which is commonly used in the literature. The items in this scale were originally written for students but were adapted for the classroom environment in this research. The 5-item scale has a Cronbach's Alpha value of .77. The reason for using this scale is the presence of a relationship between control and high expectations (see Leung & Shek, 2017). The findings of the concurrent validity analysis based on the data obtained from the second study group, as well as the results of the reliability analysis for the scales, are presented in Table 6.

Table 6.

Findings on the Concurrent Validity of the Teacher Reward and Praise Behavior Scale

	Emotional Punishment Scale	High Expectations Scale	
Factor 1 – Praise	0.273*	0.288*	
Factor 2 - Reward	0.279*	0.282*	
	Avg.	Sd.	α
Praise Factor	3.8	0.81	0.91
Reward Factor	2.5	0.81	0.91
Verbal Emotional Punishment Subscale	1.6	0.38	0.60
High Expectation Subscale	1.6	0.65	0.77

Note: N=271; *p<.05; Avg.= Average, Sd.= Standard deviation, α = Cronbach's Alpha

Based on the results of the correlation analysis conducted to obtain evidence of concurrent validity, positive correlations were found between the praise subscale and the "verbal emotional punishment scale" ($r=0.27$) and the "high expectation scale" ($r=0.28$). Similarly, the reward subscale showed positive correlations with the "verbal emotional punishment scale" ($r=0.28$) and the "high expectation scale" ($r=0.28$). In the final stage, through the analyses conducted with data from two different study groups, a 2-dimensional scale consisting of 13 items, named the "Teacher Reward and Praise Behavior Scale," was developed, and evidence of its validity and reliability was presented.

Discussion, Conclusion, and Suggestions

The purpose of this study was to develop a valid and reliable scale for measuring teachers' reward and praise behaviors in classroom management. Surprisingly, there is no scale available in the literature that specifically measures teachers' praise and reward behaviors for classroom management. Only one study focuses on measuring parental reward behaviors (Atli et al., 2022). There are robust studies related to the use of rewards and praise in educational processes, but most of them are qualitative research involving interviews with teachers (Cumhur, Kartal, Karademir & Erdinç, 2019; Güzelyurt et al., 2019; Han and Altunhan, 2022; İlgar & Örs, 2021) or review articles (Gündüz & Balyer, 2011; Köçer & Çınar, 2021). These studies contribute to the field by proposing strong alternatives to rewards. However, in studies related to classroom management with teachers, their behavioral dimensions should first be measured reliably. This research will be pioneering in the field by ensuring the reliable and valid measurement of rewards and praise, thus making valuable contributions to future studies in the field. To the best of my knowledge, this research is the first scale study that measures teachers' reward and praise behaviors, which adds to the significance of its contribution to the field.

In this research, the developed scale demonstrates adequate construct validity, concurrent validity, and internal consistency reliability, reflecting its validity and reliability characteristics. According to the results of exploratory factor analysis and reliability analysis, teachers' reward and praise behaviors are measured with two factors. The first factor is praise, and the second factor is reward behaviors.

Subsequently, the confirmatory factor analysis confirmed the two-factor structure and provided sufficient evidence of reliability.

The research's most significant feature is the use of concurrent validity measures. Reward and praise are generally considered essential elements of positive classroom management. Especially in the field of education, it is recommended to use rewards and specific praise more frequently (Alter & Haydon, 2017). According to this approach, rewards promote the increase of desired behaviors (Kazdin, 2017). Royer et al. (2019) propose behavior-specific praise as an effective classroom management strategy. However, the Verbal Emotional Punishment scale used for concurrent validity has shown a positive relationship between reward/praise and verbal emotional punishment ($\alpha = 0.29$). According to the behavioral approach, this relationship should be negative. The positive correlation suggests that teachers who use rewards and praise also tend to apply more verbal emotional punishment. This is in line with the pioneering and influential study by Newby (1991). These findings support an internal control approach. Verbal emotional punishment behaviors include sulking, yelling, and using insulting language. There is also a positive correlation with the High Expectancy scale ($\alpha = 0.27$). This finding indicates that rewards and praise serve more as control mechanisms rather than motivators. It is consistent with the "Self-Determination Theory" in literature. Controlling parents impose their own thoughts and expectations on their children (Barber, 1996). Similarly, controlling teachers allow students less room for self-expression and tend to transmit their own thoughts to the students (Reeve & Jang, 2006). The positive correlation between the two scales suggests that rewards and praise are more frequently used as control mechanisms. Contrary to the behavioral approach, this relationship should be negative. A review conducted by Bartholomew, Ntoumanis & Thogersen-Ntoumani (2009) indicates that both rewards and high expectations represent controlling behaviors. These findings provide empirical support for the "Self-Determination Theory." Especially in Turkey, where teachers often use and believe in the necessity of rewards (Güzelyurt et al., 2019), this research can contribute to changing thought patterns and fostering an internal control in classroom practices.

The scale can be used by school administrators and researchers as a single scale or as two separate subscales to measure teachers' reward and praise behaviors for classroom management. School administrators can design classroom management improvement programs based on the results obtained from this scale. Teachers may not be fully aware of how much they use rewards and praise in their classroom management practices. This scale can help increase their awareness in this regard and provide valuable insights for their professional development.

The research has several limitations. One limitation is that it measures reward and praise behaviors, which largely reflect teachers' attitudes, but there might be a discrepancy between attitudes and actual behaviors. For example, a teacher who does not believe in the motivating power of rewards and praise might still use them in classroom management to compensate for feeling inadequate in discipline. Therefore, a scale should be developed that measures teachers' attitudes towards rewards and praise separately. The research relies on self-report measures based on teachers' statements. Teachers may provide responses that are socially desirable or unknowingly misrepresent their own behaviors (Junco, 2013). To address this, the scale's predictive validity should be tested by comparing teachers' self-reported behaviors with actual observations of their classroom practices. Furthermore, the data for this research was collected online, and a separate sample should be collected in a face-to-face setting to conduct independent reliability and validity studies. Additionally, the second group of participants

consists mainly of females, which might introduce gender bias. Future studies should aim to include more male participants to ensure gender balance in the research findings.

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Permission: There is no need to get a written permission from the author to use the scale. The Teacher Reward and Praise Behavior Scale can be used by researchers and practitioners as long as it is for research purposes.

References

- Akgün, E., Yayar, M., & Dinçer, Ç. (2011). The evaluation of classroom management strategies of preschool teachers in classroom activities. *Pegem Eğitim ve Öğretim Dergisi*, 1(3), 1-9.
- Alter, P., & Haydon, T. (2017). Characteristics of effective classroom rules: A review of the literature. *Teacher Education and Special Education*, 40(2), 114–127. <https://doi.org/10.1177/0888406417700962>
- Arın, E., Tunçer, B. K., & Demir, M. K. (2016). Primary school teachers' views on constructive classroom management. *International Electronic Journal of Elementary Education*, 8(3), 363-378.
- 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.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67(6), 3296-3319.
- Bartholomew, K. J., Ntoumanis, N., & Thogersen-Ntoumani, C. (2009). A review of controlling motivational strategies from a self-determination theory perspective: Implications for sports coaches. *International Review of Sport & Exercise Psychology*, 2(2), 215-233.
- Bolat, Ö. (2016). *Beni Ödülle Cezalandırma*. Doğan Yayıncılık: İstanbul
- Bozkuş, K. (2021). A systematic review of studies on classroom management from 1980 to 2019. *International Electronic Journal of Elementary Education*, 13(4).
- Brophy, J. (2006). History of research on classroom management. *Handbook of classroom management: Research, practice, & contemporary issues*, 17-43.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout & perceived self-efficacy in classroom management. *Teaching & Teacher Education*, 16(2), 239-253.
- Browne, M. W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate Behavioral Research*, 36(1), 111–150. https://doi.org/10.1207/S15327906MBR3601_05
- Bryman, A. (2016). *Social research methods (5th ed.)*. Oxford University Press.
- Christensen, L.B., Johnson, R. B. ve Turner L. A. (2020). *Araştırma yöntemleri: Desen ve analiz*. 3. Baskı. Anı Yayıncılık.
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, & Evaluation*, 10(7), 1-9. <https://doi.org/10.7275/jyj1-4868>
- Cumhur, T. Ü. R. K., Kartal, A., Karademir, A., & Erdiñç, Ö. C. A. L. (2019). Preschool teachers' views of classroom management processes. *Uluslararası Türkçe Edebiyat Kültür Eğitim (TEKE) Dergisi*, 8(4), 2282-2299.
- Dağlı, A., & Han, B. (2017). Öğretmen görüşlerine göre Diyarbakır ili eğitim sorunları ve çözüm önerileri. *Electronic Journal of Education Sciences*, 6(12), 108-124.
- 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.
- DeVellis R. F. (2017). *Scale development*. SAGE Publications.
- Doyle, W. (1985). Recent research on classroom management: Implications for teacher education. *Journal of Teacher Education*, 36(3), 31-35.
- Doyle, W. (1986) Classroom Organization & Management, in M. Wittrock (Ed.) *Handbook on Research on Teaching*. 3rd ed., pp. 392-431. Macmillan.

- Elias, M. J., & Schwab, Y. (2006). From compliance to responsibility: Social & emotional learning & classroom management. In Evertson, C., & Weinstein, C. (eds.) *Handbook of Classroom Management: Research, practice, & contemporary issues*. Mahwah, NJ: Erlbaum, 309–341.
- Erdoğan, İ. (2003). *Sınıf yönetimi*. Sistem Yayıncılık.
- Evertson C. M., & Weinstein, C. (2006). Classroom management as a field of inquiry. In C. M. Evertson & C. Weinstein (Eds.), *Handbook of Classroom Management: Research, practice, & contemporary issues* (pp. 3-15). Lawrence Erlbaum Associates, Inc.
- Freiberg, H.J. & Lamb, S.M. (2009) Dimensions of person-centered classroom management. *Theory into Practice, 48*(2), 99-105.
- Freiberg, J. H., Oviatt, D., and Naveira, E. (2020). Classroom management meta-review continuation of research-based programs for preventing and solving discipline problems. *J. Educ. Stud. Placed Risk 25, 319–337*. doi: 10.1080/10824669.2020.1757454
- Friedman, I. A., & Farber, B. A. (1992). Professional self-concept as a predictor of teacher burnout. *The Journal of Educational Research, 86*(1), 28-35.
- Froiland, J. M. (2014). *Inspired childhood: Parents raising motivated, happy, and successful students from preschool to college*. Amazon.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy & Research, 14*(5), 449–468.
- Gündüz, Y., & Balyer, A. (2011). Eğitimde ödül ile cezanın yeri ve buna ilişkin alternatif yaklaşımlar. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi, 2*(40), 10-23
- Gürbüz, S. (2019). *AMOS ile yapısal eşitlik modellemesi*. Seçkin Yayıncılık.
- Guttman, L. (1954). A new approach to factor analysis: the Radex. In P. F. Lazarsfeld (Ed.), *Mathematical thinking in the social sciences* (pp. 258–348). Free Press.
- Güzelyurt, T., Fidan, T. O. K., Tümas, Ç., & Şuhade, U. R. U. Ğ. (2019). Okul öncesi öğretmenlerinin ödül ve ceza kullanımına ilişkin görüşleri. *Temel Eğitim, 1*(4), 21-28.
- Han, B., & Altunhan, M. (2022). Okul öncesi öğretmenlerinin ödül ve ceza uygulamalarına yönelik görüşleri. *Erken Çocukluk Çalışmaları Dergisi, 6*(2), 480-505.
- 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.
- Hu, L., & 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.
- İlgar, Ş., & Örs, E. (2021). Çocuklarla iletişimde kullanılan övgü sözlerinin öğretmen, öğretmen adayı ve ebeveyn açısından analizi. *Social Science Development Journal, 26*, 78-98.
- Jones, V. F., & Jones, L. S. (2012). *Comprehensive classroom management, creating communities of support & solving problems (10th ed.)*. Upper Saddle River, NJ: Pearson.
- Junco, R. (2013). Comparing actual & self-reported measures of Facebook use. *Computers in Human Behavior, 29*(3), 626-631.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational & Psychological Measurement, 20*(1), 141-151.
- Kazdin, A. E. (2017). The token economy. In *Applications of conditioning theory* (pp. 59-80). Routledge.
- Kline, R. B. (2016). *Principles & practice of structural equation modeling (4th ed.)*. Guilford Press.
- Köçer, G., & Çınar, F. (2021). Ödül ve ceza olmadan çocuk disiplini mümkün mü?. *Erzincan Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 14*(2), 410-429.

- Korpershoek, H., Harms, T., de Boer, H., van Kuijk, M., & Doolaard, S. (2016). A meta-analysis of the effects of classroom management strategies & classroom management programs on students' academic, behavioral, emotional, & motivational outcomes. *Review of Educational Research*, 86(3), 643-680.
- Kowalski, M. J., & Froiland, J. M. (2020). Parent perceptions of elementary classroom management systems & their children's motivational & emotional responses. *Social Psychology of Education*, 23(2), 433-448.
- Leung, J. T. Y., & Shek, D. T. L. (2017). The influence of parental expectations & parental control on adolescent well-being in poor Chinese families. *Applied Research in Quality of Life*, No. 9, 1-19.
- Lewis, R., Romi, S., Katz, Y.J. & Qui, X. (2008) Students' Reaction to Classroom Discipline in Australia, Israel, & China, *Teaching & Teacher Education*, 24(3), 715-724.
- 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.
- Maggin, D. M., Chafouleas, S. M., Goddard, K. M., & Johnson, A. H. (2011). A systematic evaluation of token economies as a classroom management tool for students with challenging behavior. *Journal of school psychology*, 49(5), 529-554.
- Manley, H., Tu, E. N., Reardon, T., & Creswell, C. (2023). The relationship between teachers' day-to-day classroom management practices & anxiety in primary school children: A systematic review. *Review of Education*, 11(1), e3385.
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- & higher order factor models & their invariance across groups. *Psychological Bulletin*, 97(3), 562-582. <https://doi.org/10.1037/0033-2909.97.3.562>
- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research based strategies for every teacher*. Virginia: ASCD.
- Matsunaga, M. (2010). How to factor-analyze your data right: Do's, don'ts, & how-to's. *International Journal of Psychological Research*, 3(1), 97-110.
- Muthen, L. K., & Muthen, B. (1998-2017). *Mplus User's Guide*. Los Angeles, CA: Muthén & Muthén.
- Newby, T. J. (1991). Classroom motivation: Strategies of first-year teachers. *Journal of educational psychology*, 83(2), 195.
- Oliver, R. M., Wehby, J. H., & Reschly, D. J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews*, 7(1), 1-55.
- Öztürk, Y., & Gangal, M. (2016). Okul öncesi eğitim öğretmenlerinin disiplin, sınıf yönetimi ve istenmeyen davranışlar hakkındaki inançları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 31(3), 593-608.
- Pigge, F.L., & Marso, R.N. (1997). A seven year longitudinal multi-factor assessment of teaching concerns development through preparation & early teaching. *Teaching & Teacher Education*, 13, 225-235.
- Reeve, J., & Jang, H. (2006). What teachers say & do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98(1), 209.
- Royer, D. J., Lane, K. L., Dunlap, K. D., & Ennis, R. P. (2019). A systematic review of teacher-delivered behavior-specific praise on K-12 student performance. *Remedial & Special Education*, 40(2), 112-128.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, & wellness*. Guilford Publications.

- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, & wellness*. Guilford Publications.
- Schumacker, R., & Lomax, R. (2016). *A beginner's guide to structural equation modeling (4th ed.)*. Routledge.
- Su, Y. L., & Reeve, J. (2011). A meta-analysis of the effectiveness of intervention programs designed to support autonomy. *Educational Psychology Review*, 23, 159-188.
- Suh, Y. (2015). The performance of maximum likelihood and weighted least square mean and variance adjusted estimators in testing differential item functioning with nonnormal trait distributions. *Structural Equation Modeling: A Multidisciplinary Journal*, 22(4), 568–580.
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social & emotional learning interventions: A meta-analysis of follow-up effects. *Child development*, 88(4), 1156-1171.
- Wubbels (2011) An international perspective on classroom management: what should prospective teachers learn?, *Teaching Education*, 22:2, 113-131,
- Yaman, E., & Güven, N. (2014). Öğrencilerin motivasyon düzeyine etki eden önemli bir kavram: Ödül ve ceza. *International Journal of Human Sciences*, 11(1), 1163-1177.
- Yurdabakan, İ. & Çüm, S. (2017). Davranış bilimlerinde ölçek geliştirme (açıklayıcı faktör analizine dayalı). *Turkish Journal of Family Medicine and Primary Care*. 11(2). 108-126.

Appendix: Scale Items in Turkish

Öğretmen Ödül ve Övgü Davranış Ölçeği

M1-Öğrencim bir başarı gösterdiğinde, onu överim.
M2-Öğrencilerimi motive etmek için sınıfta övgüyü kullanırım.
M3-Öğrencilerimin çabalarını takdir etmek için övgü kullanırım.
M4-Öğrencilerimi motive etmek için övgüyü kullanırım.
M5-Öğrencim doğru davranışları sergilediğinde onu överim.
M6-Öğrencim istediğim gibi davrandığında, onu överim.
M1-Öğrencilerimin daha çok çaba göstermeleri için, onlara ödül veririm.
M2-Başarılı çalışmaları ödüllendirerek, öğrencilerimi teşvik ederim.
M3-Öğrencilerimi motive etmek için ödül kullanırım.
M4-Öğrencilerimi yetiştirirken ödül kullanırım.
M5-İstenmeyen davranışları önlemek için ödül sistemini kullanırım.
M6-Öğrencilerim daha çok çalışsın diye ödül vaat ederim.
M7-Öğrencilerime doğru davranışları kazandırmak için, ödül kullanırım.