

# The Impact of Director' Leadership, Educational Environment, Teacher Efficacy and Extracurricular Sports Programs on Job Satisfaction of Kindergarten Teachers

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## Abstract

The role of kindergarten teachers as a viable alternative to childcare is becoming increasingly important due to the rising amount of time children spend in educational institutions compared to the time, they spend with their parents in the home environment. The primary aim of this research is to assess the influence of directorial leadership, the educational environment, teacher efficacy, and extracurricular programmes on the level of job satisfaction experienced by kindergarten teachers. This study includes a sample size of 256 kindergarten teachers. The research findings were subjected to analysis using Smart PLS 4 software, employing the Partial Least Squares (PLS) algorithm and the Bootstrapping method. The findings of the empirical study indicate a positive correlation between the leadership of directors, the educational environment, teacher efficacy, and extracurricular programmes with the job satisfaction of kindergarten teachers. This study holds both theoretical and practical significance, as its findings demonstrate the potential to enhance the working environment for teachers responsible for primary childhood education. Additionally, it provides fundamental data that can contribute to the improvement of children's learning abilities and offers a foundation for policymaking that takes into account the health education of teachers.

**Keywords:** Kindergarten Teacher, Director's Leadership, Educational Environment, Teacher Efficacy, Job Satisfaction

## 1. Introduction

Contemporary society is currently undergoing swift transformations in the configuration of familial units, primarily attributed to the escalation of economic prosperity, the rise in income levels resulting from industrialization, and the influx of information. The birth rate was documented as 1.13 and has exhibited a consistent downward trend subsequently. The value in 2015 was recorded as 1.24, followed by a decrease to 1.17 in 2016, further declining to 1.05 in 2017, and ultimately reaching 0.97 in 2018, thereby surpassing the threshold of 1.0. The metric has exhibited a persistent downward trend, ultimately reaching a value of 0.84 in the year 2020, as reported by [Deziel et al. \(2020\)](#). The decline in the birth rate of married households is considered to be the primary factor contributing to the observed low birth rate. The decline in fertility rates can be attributed to several factors, including women's prioritisation of social activities over childcare and the financial burden associated with raising children. Additionally, women's career interruptions during pregnancy and childbirth, as well as the indirect

costs of physical and mental labour involved in childrearing, contribute to this trend ([Lim & Seo, 2021](#))

The rise in women's engagement in economic endeavours is becoming a matter of concern at the national level due to its association with an increase in dual-income households and a decline in fertility rates ([Lee & Kim, 2021](#)). Consequently, there is a growing emphasis on the role of society and the state in the upbringing of children, with a particular focus on enhancing the quality of early childhood education. In light of recent shifts in social dynamics, the task of raising children now requires an increased emphasis on "social nurture" in addition to traditional "family nurture." Consequently, early childhood education institutions are assuming a more prominent role in this regard ([Hall et al., 2023](#)). The primary objective of early childhood education establishments is to assess the academic performance of students and subsequently modify their developmental and educational approaches based on the obtained results. The achievement of this goal is contingent upon the role and qualifications of the teacher, as emphasised by [Glaveli, Vouzas, and Roumeliotou \(2022\)](#). Hence, considerable

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emphasis is placed on the significance of kindergarten educators as they assume a crucial function in the maturation and advancement of young learners.

Furthermore, there is a need for the implementation of a social childcare support system that can effectively facilitate women's engagement in economic endeavours. There is a need for educational services that offer exceptional early childhood education and equitable opportunities for kindergarten teachers who assume the responsibility of carers on behalf of parents (Zhang, Fathi, & Mohammaddockht, 2023). Ensuring the provision of high-quality educational services to young children necessitates the expeditious acquisition of highly competent teachers. Despite the presence of adequate resources and a well-designed curriculum in early childhood education, the pivotal role of the teacher remains indispensable as instruction is primarily facilitated through the dynamic interaction between educators and young learners (Duan et al., 2023). The quality of early childhood education is influenced by a multitude of factors; however, the primary factor that significantly impacts the enhancement of educational quality lies in the role and qualifications of teachers. The significance of kindergarten teachers in early childhood development and education cannot be overstated, as the role of the teacher holds greater importance during this period compared to any other stage of life.

According to the director's philosophy or values, a director's leadership influences kindergarten operations (Hewett & La Paro, 2020). Therefore, examining how the director's leadership affects the kindergarten environment can provide important data for improving teachers' job satisfaction and what a director needs to do to manage the kindergarten effectively. Significance can be found in the part that can grasp cognition. Next, the educational environment is related to the successful operation of the curriculum. Specifically, since infants learn and develop through close interaction with their surrounding environment, how to construct and provide an educational environment for kindergarten is a fundamental issue, and continuous research should be conducted (Chen et al., 2022). Lastly, teacher efficacy is the belief that teachers can affect children's growth and development through teaching behavior, thinking patterns, and emotional responses to stress. Therefore, teacher efficacy is related to students' high academic achievement and motivation levels and affects teachers' classroom practice, enthusiasm, dedication, and teaching behavior. No doubt, measuring job performance is a critical process (Darpan & Ibrar, 2023).

Finally, the significance of kindergarten teachers as a substitute for childcare is growing as children spend more

time at educational institutions than they spend with their parents at home. Hence, the objective of this study is to determine the impact of director's leadership, educational environment, teacher efficacy and extracurricular programs on job satisfaction of kindergarten teachers. The findings of this research are important from theoretical and practical perspectives. The research also has some future directions to motivate the researchers for the future studies. This study is divided into the key important sections including the review of literature, the methodology of study, the analysis of data, the findings of research and discussion based on these findings. In accordance, this study has highlighted the implications of the study followed by its future directions.

## 2. Review of Literature

The director's leadership emphasises establishing a clear direction for teachers' roles through trust, fostering competency development, evaluating performance, and facilitating feedback and communication (Hu et al., 2019). The leadership of the director supports the development of teachers' abilities and psychological stability, leading to improved job performance and job satisfaction. The director's leadership plays a crucial role in enabling kindergarten teachers to effectively showcase their education and teaching skills. It is also vital for enhancing job satisfaction by improving job performance and efficiency (Xia, Wang, & Zhang, 2023). In other words, director's leadership in a kindergarten involves efficiently carrying out tasks by demonstrating qualities such as leadership, control, accountability, and guidance to fulfil the kindergarten's objectives. Leadership is widely recognised as a crucial element within organisations, as their effectiveness hinges on the presence or absence of effective leadership. Leadership is a multifaceted concept that encompasses different dimensions such as an individual's personality, the exertion of influence, power dynamics, interpersonal relationships, and the ability to persuade (Hall et al., 2023).

Ultimately, the functioning of institutions is influenced by the educational philosophy and personality of their directors, as well as the prevailing organisational culture. Glaveli et al. (2022) suggest that teachers can be influenced both formally and informally. Therefore, the director's rapport with the teacher plays a crucial role in influencing job satisfaction. The director should demonstrate leadership qualities centred around change and innovation in order to improve teachers' performance and foster innovation, ultimately enabling them to achieve self-fulfilment in their roles (Yan et al., 2022). The teacher's

leadership is essential in recognising the significance and purpose of their work in early childhood education. By experiencing satisfaction in educating children, addressing various challenges, and striving for ongoing progress, the teacher can effectively bring about positive change and improvement.

Lee and Kim (2021) categorised the leadership characteristics of directors into three types: directive, persuasion, and delegation. The directive approach to decision-making is centred on the director and does not involve the teacher in the decision-making process. The director possesses both authority and responsibility and demonstrates task-oriented traits. The persuasion type incorporates and acknowledges the teacher's viewpoints during the decision-making process. The delegation type prioritises complete decision-making delegation and grants kindergarten teachers a significant level of autonomy. Moreover, the type of delegation is based on a significant level of activation and interaction. According to a study by Song, Gu, and Zhang (2020), directors' leadership style has a positive effect on kindergarten teachers' performance in creative roles. The director's adept leadership significantly bolstered the professionalism of kindergarten teachers.

Furthermore, there are reports indicating that it has a positive impact on teachers' self-efficacy and their performance in knowledge creation. As defined by Yang et al. (2022), the director-teacher relationship encompasses the overall assessment of teachers regarding the director's competence as well as the extent and calibre of feedback provided by the director on teachers' performance. The factors mentioned encompassed a disposition of benevolence, a perception of solidarity among the individuals, and a culture of mutual collaboration founded on trust within the interpersonal connections among the principal, the teacher, and the teacher. Furthermore, Sahito and Vaisanen (2020) conducted a study focusing on kindergarten teachers, which revealed that the primary factor contributing to teacher dissatisfaction was the absence of adequate support for educators. Within the realm of education, the conduct exhibited by managers plays a pivotal role in influencing the enhancement of educational practises as well as the overall contentment experienced by teachers in their professional roles.

**H1:** *There is a relationship between director's leadership and job satisfaction of kindergarten teachers.*

The educational environment refers to the physical infrastructure established to facilitate the ongoing operation of children's education within a specific location. The primary objective is to facilitate optimal educational endeavours by establishing a conducive setting that

enables the attainment of desired learning outcomes (Huh, 2023). The educational milieu within early childhood education institutions plays a crucial role in facilitating the development of young children. When parents make the decision to enrol their children in an early childhood education institution, they have high expectations for providing them with a superior educational experience. Parents carefully choose a preschool that they perceive to be of superior quality and aligns with their personal criteria (Ekmen & Okçu, 2021). Hence, it is imperative during the selection procedure to ascertain the constituents of the evaluation criteria pertaining to the components of the educational milieu that exceptional institutions offering early childhood education ought to possess. This pertains to the calibre of early childhood education, encompassing various factors associated with favourable experiences and outcomes for young children.

Additionally, factors such as teacher-to-child ratio, teacher-toddler interaction, teacher's training level, teacher-parent interaction, original educational programme, and physical environment, including the classroom, may also play a role. The physical environment necessitates a secure and comfortable setting for children, akin to the comfort of their own homes. The educational environment of early childhood education institutions encompasses the conditions that shape the educational experience of young children. These conditions are influenced by various factors, including teachers, directors, facilities, educational programmes, economics, outpatients, parent education, hygiene, and safety. Schaack, Le, and Stedron (2020) emphasised the importance of creating a stable educational environment in early childhood education institutions. This environment should facilitate cooperation among young children, provide emotional support from adults, and promote a sense of safety for effective learning. Additionally, it has been suggested that the presence of a teacher in the human environment contributes to the emotional development of children, in conjunction with the physical environment. According to Raymond and Gabriel (2023), the language and cognitive development of children is influenced by the educational environment, specifically through the peer relationships formed among children.

The kindergarten education environment is crucial for educational performance and is strongly linked to the work motivation and educational attitude of kindergarten teachers (Arviv Elyashiv, Carmel, & Rozenberg, 2023). The satisfaction of kindergarten teachers with their jobs is closely linked to the value of early childhood education. Since 1990, research has been conducted to improve the quality of kindergarten learning environments in the United States. These studies have identified and enhanced

the qualitative factors that impact children's growth and development. There is a widely held belief that the quality of the educational environment in kindergartens has a significant impact on educational outcomes. The educational environment encompasses both physical and symbolic dimensions. The physical meaning of a child-friendly space refers to an environment that ensures the safety and happiness of children.

On the other hand, the symbolic meaning of such spaces signifies the inclusion and acceptance of children in urban design and planning (Zang & Feng, 2023). The principles for composing the kindergarten education environment can be summarised as follows: It is important to provide ample indoor and outdoor space for activities in a dedicated building for young children. Additionally, the design of the early childhood education facility should align with its purpose or programme, offering a diverse range of experiences and stimuli for young children. Furthermore, the structure of the resource should be designed in a manner that accommodates the developmental characteristics, maturity levels, interests, and individual differences of children, thereby facilitating easy utilisation and organisation by this target audience. Children's health and safety should be prioritised while also fostering order, independence, and creativity. Additionally, the structure of the environment should prioritise the safety and comfort of children. Furthermore, the system should allow for the customization of different configurations and flexible environments through the arrangement of movable facilities and instruments. Additionally, aesthetic considerations should be taken into account.

**H2:** *There is a relationship between educational environment and job satisfaction of kindergarten teachers.*

Teachers' efficacy refers to the belief that teachers have in their capacity to positively impact students' learning outcomes. Carmel et al. (2021) found that instructors with high teacher efficacy demonstrate greater openness and willingness to adopt innovative approaches in their teaching practises. Nong, Ye, and Hong (2022) discovered a positive correlation between student mistakes and teacher efficacy. Teachers were noted for their patient observation without adopting a critical stance. Teacher efficacy refers to the perception and motivation of kindergarten teachers, specifically regarding their ability to positively influence children. Teacher efficacy is a crucial factor in teaching behaviour and the process of instruction, as well as a variable that can account for variations in individuals' teaching and learning abilities (Kim, 2013). It influences the enhancement of learners' altruistic behaviour and life satisfaction. Understanding the

interests and needs of children allows for the creation of a favourable environment that promotes their growth, development, and educational activities (Park & Wee, 2020). Teacher efficacy refers to the belief that teachers have the ability to influence students' learning activities. Beliefs regarding teachers' capacity to enhance learners' learning abilities and positively impact their achievement outcomes are widely acknowledged. Teacher efficacy refers to the level of confidence a teacher has in their ability to influence the behaviour of their students.

Teachers with high teacher efficacy demonstrate persistence and dedication towards students with low academic achievement, diligently fulfilling their responsibilities, and employing innovative approaches when confronted with challenging tasks. Teacher efficacy is strongly associated with children's academic achievement, as well as a teacher's persistence, passion, responsibility, and teaching behaviour. Zhang et al. (2023) posited that teacher efficacy is characterised by teachers' positive attitudes and confidence in their educational abilities. It demonstrates the extent to which teachers believe they can influence students' academic achievement. The teacher's belief in their own ability to effectively execute and manage the required course of action is reported. Duan et al. (2023) suggest that human behaviour is influenced by environmental and cognitive factors. Environmental factors do not have a direct impact on behaviour, but they are subject to cognitive mediating processes that ultimately shape behaviour. Teaching efficacy was used to explain the cognitive process.

**H3:** *There is a relationship between teacher's efficacy and job satisfaction of kindergarten teachers.*

Job satisfaction refers to the degree of contentment employees feel towards their jobs and work settings, influenced by psychological, physiological, and environmental factors (Zhang et al., 2022). The job satisfaction of kindergarten teachers can be defined as their level of general happiness with their work, working environment, and welfare in relation to their roles and responsibilities. Pérez-Ordás et al. (2019) define job satisfaction as a positive emotional state resulting from an individual's evaluation of their job experience. Job satisfaction refers to the positive emotional state experienced by a kindergarten teacher during the performance of job-related tasks. It is a measure of the individual's level of contentment in the interaction between themselves and the work environment. Aizenberg and Oplatka (2019) provided a definition of job satisfaction as the extent to which individuals' needs, values, attitudes, and beliefs align with their job and the surrounding work environment. Teacher job satisfaction

encompasses the level of contentment experienced by educators in relation to their job and the overall work environment (Deziel et al., 2020). Job satisfaction is a variable that is subject to change due to external factors. It possesses characteristics of both independent and dependent variables, which can impact the role and effectiveness of an organisation.

In similar vein, Hewett and La Paro (2020) discovered that job satisfaction is achieved through the fulfilment of both internal and external needs. The level of psychological stability was determined by the satisfaction derived from experiencing emotional enthusiasm and interest in one's job. Diaz et al. (2019) found that the working environment in early childhood education institutions is linked to job satisfaction among kindergarten instructors, individual teachers' attitudes towards their jobs, and social recognition of teachers' professionalism. This association is influenced by various factors, including the operational characteristics of educational facilities, principals, fellow teachers, and parents. Various factors, including human relationships, have been proposed as potential defining characteristics. Sports programmes can be beneficial for teachers to improve their skills and enhance job performance (Baptiste, 2019). Teachers' involvement in extra-curricular activities positively impacts their job satisfaction and subsequently enhances their performance. Sports play a crucial role in promoting mental relaxation and enhancing cognitive abilities. Developing a productive attitude towards work and offering reliable opportunities for job performance are beneficial.

**H4:** *There is a relationship between extracellular sports programs and job satisfaction of kindergarten teachers.*

### 3. Methodology

This study employs a quantitative research design to examine the relationship between the variables of interest through data collection. The association between variables is assessed using Likert scale data. The Likert scale is commonly employed in social science research. The scale items for each variable were derived from previous studies in the field of research. The scale items used to assess the impact of the director's leadership on job satisfaction among kindergarten teachers were derived from previous studies conducted by Jo (2014), Jin-Iee (2017), and Kim and Lee (2018). The scale items used to assess the educational environment's impact on job satisfaction among kindergarten teachers were adopted from Jo (2014) study. The scale items used to measure the impact of job satisfaction among kindergarten teachers were adopted from Kim (2013) study on teacher efficacy. The scale items

used to measure the impact of an extracurricular sports programme on job satisfaction among kindergarten teachers were adopted from the study conducted by Pérez-Ordás et al. (2019). The job satisfaction scale items were obtained from Park and Wee (2020) study. The items were sent to panel reviewers who possess expertise in the same research field. Participants were requested to provide information regarding the face validity of the questionnaire. The reviewers confirmed the questionnaire's face and content validity. Questionnaires were printed for data collection. The study employed a random sampling approach to collect data, as the population of the study and the kindergarten teachers were known and under observation. This approach is appropriate for studies involving a homogeneous population. The survey-based method of data collection is appropriate when employing random sampling techniques.

The data were collected using a survey method. A total of 300 questionnaires were distributed, and 256 completed questionnaires were collected and analysed after excluding insincere responses. Participants in the survey were informed about the research nature of the survey and provided their consent before its administration, in adherence to research ethics. The data was analysed using the Smart PLS 4 programme, which included descriptive statistical analysis, measurement model assessment, and structural model assessment. The measurement model's verification process was used to confirm the validity and discriminating power between latent variables, depending on whether each indicator adequately explains the latent variable. The statistical significance of the path coefficients and variables was confirmed through a structural relationship analysis. Structural equation model analysis was used to make sure the scale was valid. This included measurement model analysis and significance verification of mediation pathways.

#### Data Analysis and Findings

The evaluation of data distribution normality occurs in the initial stage. The dataset was carefully examined to detect any missing values. The dataset was found to be devoid of any missing values during the analysis. Additionally, skewness and kurtosis are assessed to determine the extent to which the data conforms to a normal distribution. Royston (1992) noted that kurtosis and skewness falling within the range of -2 to +2 indicate conformity to the properties of a normal distribution. A normal distribution is characterised by a pattern of responses that exhibit both skewness and kurtosis approaching zero. Table 1 demonstrates that the data has achieved normality. Therefore, the data collected is highly reliable and can be used for further statistical analysis.

**Table 1***Normality of Distribution*

No.	Items	Missing	Mean	Standard Deviation	Excess Kurtosis	Skewness
1	DL1	0	3.244	1.523	-0.491	0.099
2	DL2	0	3.262	1.813	-0.584	0.438
3	DL3	0	3.529	1.882	-0.811	0.298
4	DL4	0	3.502	1.916	-0.814	0.37
5	EI5	0	3.552	1.739	-0.492	0.304
6	DL5	0	3.511	1.829	-0.726	0.236
7	DL6	0	3.502	1.839	-0.869	0.159
8	DL7	0	3.679	1.864	-0.776	0.189
9	DL8	0	3.701	1.872	-0.76	0.319
10	EE1	0	3.692	1.944	-0.807	0.343
11	EE2	0	3.584	1.897	-0.732	0.38
12	EE3	0	3.584	1.852	-0.626	0.362
13	EE4	0	3.602	1.913	-0.799	0.335
14	EE5	0	3.475	1.784	-0.459	0.45
15	EE6	0	3.52	1.921	-0.914	0.22
16	EE7	0	3.462	1.826	-0.643	0.311
17	EE8	0	3.633	1.779	-0.599	0.284
18	TE1	0	3.077	1.486	-0.128	0.593
19	TE2	0	3.19	1.504	0.435	0.885
20	TE3	0	3.226	1.453	0.753	0.91
21	TE4	0	3.172	1.451	0.458	0.779
22	TE5	0	3.136	1.385	0.518	0.68
23	TE6	0	3.226	1.502	0.32	0.706
24	TE7	0	3.158	1.461	0.506	0.837
25	TE8	0	3.036	1.42	-0.206	0.432
26	JS1	0	3.199	1.364	0.457	0.669
27	JS2	0	3.131	1.438	0.176	0.65
28	JS3	0	3.109	1.488	0.185	0.7
29	JS4	0	3.249	1.394	-0.111	0.537
30	JS5	0	3.176	1.349	0.311	0.599
31	JS6	0	3.054	1.344	-0.19	0.531
32	JS7	0	3.163	1.298	0.363	0.645
33	JS8	0	3.172	1.407	-0.023	0.702
34	JS9	0	3.199	1.41	0.196	0.696
35	ESP1	0	3.222	1.325	0.311	0.702
36	ESP2	0	3.317	1.594	-0.576	0.186
37	ESP3	0	3.281	1.729	-0.693	0.317
38	ESP4	0	3.33	1.93	-0.864	0.392
39	ESP5	0	3.321	2.007	-1.031	0.425

The evaluation of data distribution normality occurs in the initial stage. The dataset was carefully examined to detect any missing values. The dataset was found to be devoid of any missing values during the analysis. Additionally, skewness and kurtosis are assessed to determine the extent to which the data conforms to a normal distribution. Royston (1992) noted that kurtosis and skewness falling within the range of -2 to +2 indicate conformity to the

properties of a normal distribution. A normal distribution is characterised by a pattern of responses that exhibit both skewness and kurtosis approaching zero. Table 1 demonstrates that the data has achieved normality. Therefore, the data collected is highly reliable and can be used for further statistical analysis.

Hence, the items employed in this study demonstrate reliability at the individual level. In addition, researchers

examine the composite reliability and Cronbach's alpha to assess the degree of internal consistency among the items comprising a given construct. Internal consistency is accomplished when both Cronbach's alpha and composite dependability exceed a threshold of 0.70 (Peterson & Kim, 2013). The data analysis indicates that the data has achieved internal consistency. The average variance extracted is

computed to evaluate the variability of items loaded on a specific construct. The results suggest that there is a significant variability, exceeding 50% (Alarcón, Sánchez, & De Olavide, 2015), in the elements that contribute to a single construct, which is considered acceptable. The results are displayed in Table 2. Convergent validity is highly significant for conducting subsequent data analysis.

**Table 2**

*Convergent Validity*

<b>Variables</b>	<b>Items</b>	<b>Factor Loading</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted</b>
Director Leadership	DL1	0.891	0.962	0.968	0.792
	DL2	0.896			
	DL3	0.892			
	DL4	0.881			
	DL5	0.903			
	DL6	0.889			
	DL7	0.882			
	DL8	0.885			
Educational Environment	EE1	0.918	0.963	0.969	0.795
	EE2	0.900			
	EE3	0.868			
	EE4	0.898			
	EE5	0.893			
	EE6	0.900			
	EE7	0.884			
	EE8	0.873			
Extracarricular Sports Programs	ESP1	0.792	0.965	0.970	0.803
	ESP2	0.863			
	ESP3	0.897			
	ESP4	0.914			
	ESP5	0.850			
Job Satisfaction	JS1	0.864	0.916	0.936	0.747
	JS2	0.867			
	JS3	0.868			
	JS4	0.898			
	JS5	0.866			
	JS6	0.890			
	JS7	0.894			
	JS8	0.911			
	JS9	0.898			
Teacher Efficacy	TE1	0.867	0.965	0.970	0.782
	TE2	0.896			
	TE3	0.902			
	TE4	0.897			
	TE5	0.899			
	TE6	0.912			
	TE7	0.923			
	TE8	0.873			

The purpose of testing discriminant validity is to assess the presence of collinearities in the research data. The Heterotrait-Monotrait (HTMT) approach is utilised to assess discriminant validity. This methodology is commonly used in social science research. Discriminant validity is achieved when the values in the HTMT matrix are below the

threshold of 0.85 (Henseler, Ringle, & Sarstedt, 2015). The study's results, displayed in Table 3, offer empirical evidence supporting the research data's significant discriminant validity. Therefore, it can be concluded that the dataset does not show any instances of multiple collinearities, making it appropriate for further analysis.

**Table 3**

*Discriminant Validity*

Variables	Director Leadership	Educational Environment	Extracarricular Sports Programs	Job Satisfaction	Teacher Efficacy
Director Leadership					
Educational Environment	0.786				
Extracarricular Sports Programs	0.733	0.692			
Job Satisfaction	0.691	0.662	0.682		
Teacher Efficacy	0.676	0.668	0.816	0.818	

Path analysis is employed to examine the associations between variables. Structural equation modelling findings are utilised for this objective. A t-value greater than 1.96 indicates statistical significance in the relationship between two variables (Hair, Howard, & Nitzl, 2020). The study confirmed the acceptance of H1, which states that there is a significant impact of director's leadership on job satisfaction among kindergarten teachers. The study confirmed that H2 is supported, indicating a significant

relationship between the educational environment and job satisfaction of kindergarten teachers. Furthermore, the study provided confirmation that H3 is supported, indicating that there is a significant relationship between teacher efficacy and job satisfaction among kindergarten teachers. The study ultimately confirmed the acceptance of H4, indicating a significant impact of extracurricular sports programmes on the job satisfaction of kindergarten teachers.

**Table 4**

*Path Findings*

Relationships	Original Sample	Standard Deviation	T Statistics	P Values
Director Leadership -> Job Satisfaction	0.395	0.069	5.724	0.000
Educational Environment -> Job Satisfaction	0.372	0.067	5.552	0.000
Teacher Efficacy -> Job Satisfaction	0.116	0.035	3.285	0.001
Extracarricular Sports Programs -> Job Satisfaction	0.876	0.036	24.449	0.000

The second question concerns the concept of predictive relevance, which evaluates the degree to which a model possesses predictive relevance. A positive value suggests a favourable outcome in this context. Furthermore, Q2 aims to determine the predictive value of the endogenous

constructs. Koban et al. (2012) found that positive values in Q2 indicate good quality reconstructed values and predictive relevance of the model. The research model demonstrates strong predictive validity, as indicated by the Q2 results presented in Table 5.

**Table 5**

*Predictive Relevance*

Variable	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Director Leadership	1768	1768	
Educational Environment	1768	1768	
Extracarricular Sports Programs	1768	1768	
Job Satisfaction	1989	593.957	0.701
Teacher Efficacy	1105	1105	



## 4. Discussion

The research findings validated the hypotheses that were developed conceptually. The study's objective is fulfilled through its findings. The study confirmed a significant achievement of H1, as empirical data indicates a relationship between the leadership of directors and the job satisfaction of kindergarten teachers. The outcomes of this association are examined in relation to existing research findings. [Sahito and Vaisanen \(2020\)](#) argue that the directive approach to decision-making primarily relies on the director, with minimal teacher involvement. The director exhibits full authority and responsibility, along with task-oriented characteristics. [Yang et al. \(2022\)](#) propose that the persuasion style involves acknowledging and mirroring the instructor's viewpoints when making decisions. The delegation type prioritises the full transfer of decision-making authority and provides kindergarten teachers with a substantial level of autonomy. Additionally, the type of delegation is determined by a substantial level of activation and engagement. [Yan et al. \(2022\)](#) found that directors' leadership positively influenced the creative role performance of kindergarten teachers.

The study found that the director's leadership had a significant impact on enhancing professionalism among kindergarten teachers. Research has shown that it positively affects instructors' self-efficacy and performance in knowledge creation. [Xia et al. \(2023\)](#) argue that the user's text lacks substantive information. It has been posited that the nature of the relationship between the director and instructors involves a thorough evaluation of the director's competency, as well as an evaluation of the director's provision of feedback on the quantity and quality of the teachers' performance. The factors that were identified include a disposition of benevolence, a perception of solidarity among the constituents, and a culture of mutual collaboration based on trust within the interpersonal dynamics between the principal, the teacher, and the teacher. [Hu et al. \(2019\)](#) found that kindergarten educators expressed dissatisfaction primarily due to the lack of sufficient support provided to teachers. In the field of education, the behaviour demonstrated by managers plays a crucial role in shaping the improvement of educational methodologies and the overall level of job satisfaction among instructors.

Furthermore, it has been demonstrated that H2 holds considerable merit. Empirical data show a clear relationship between the educational environment and kindergarten teachers' level of job satisfaction, which supports this claim. The outcomes of this association are

examined and contrasted with the results of prior research, as per established conventions. The educational environment encompasses both practical and theoretical implications, according to the study by [Arviv Elyashiv et al. \(2023\)](#). The physical significance of a space pertains to its capacity to offer a safe and enjoyable habitat for children to inhabit. Conversely, the symbolic importance of such a physical environment implies that children are embraced and acknowledged as essential constituents of society within the framework of urban architecture and planning. [Zang and Feng \(2023\)](#) propose a succinct articulation of the principles that govern the design of the educational environment in kindergartens. First and foremost, it is crucial that the environment created for young children possesses sufficient indoor and outdoor areas to support a wide range of activities.

Ideally, it is desirable for this area to be distinct from other edifices, thereby guaranteeing the presence of a self-contained establishment exclusively catering to the requirements of young children. [Schaack et al. \(2020\)](#) argue that the architectural design of early childhood education institutions should be meticulously orchestrated to align with their intended goals or programmes, thereby guaranteeing the provision of a comprehensive array of experiences and stimuli for young children. In addition, it is important to design the structure of the resource in a way that promotes ease of use and organisation for children, taking into account their developmental characteristics, levels of maturity, individual variations, and personal interests. According to the findings of the study by [Ekmen and Okçu \(2021\)](#), it is crucial to prioritize children's health and safety as well as to create an environment that encourages qualities like independence, creativity, and orderliness. Further, it is crucial that the architectural layout of the environment is intentionally crafted to cultivate a prevailing atmosphere of security and well-being for young individuals. [Huh \(2023\)](#) emphasises the significance of verifying the practicality of establishing a variety of configurations and flexible environments by employing mobile facilities and instruments. Furthermore, it is imperative to take into account the aspect of aesthetics. Thirdly, H3 is significantly achieved because based on empirical data, there is a relationship between teacher efficacy and job satisfaction of kindergarten teachers. However, the results of this relationship are discussed in contrast and compare to the findings of previous studies. According to [Zhang et al. \(2022\)](#), educators who possess a strong sense of teacher efficacy exhibit a steadfast commitment to supporting students who struggle academically, diligently fulfilling their responsibilities, and actively seeking innovative approaches when confronted with intricate challenges. [Nong et al. \(2022\)](#)

posit a strong association between the construct of teacher efficacy and children's academic performance, as well as the instructor's perseverance, enthusiasm, accountability, and instructional practises. The argument suggests that teachers' perception of teacher efficacy is marked by a favourable attitude or a sense of assurance in their ability to successfully execute educational responsibilities.

As stated by [Chen et al. \(2022\)](#), the aforementioned statement elucidates the perspective held by educators with regards to their perceived capacity to exert influence on the academic accomplishments of their students. The documentation captures the teacher's confidence in their ability to proficiently carry out and manage the requisite steps for maintaining the educational process. Scholarly research suggests that the behaviour of individuals is shaped by a confluence of environmental and cognitive factors. [Aizenberg and Oplatka \(2019\)](#) argue that behaviour is not directly influenced by environmental factors, but rather undergoes cognitive mediating processes that subsequently shape and impact behaviour. The cognitive process was elucidated by employing the construct of teaching efficacy.

Ultimately, the attainment of H4 is of notable significance as it is supported by empirical evidence indicating a correlation between engagement in extracurricular sports activities and the level of job satisfaction experienced by kindergarten teachers. The outcomes of this association are examined in relation to existing literature and compared to the results of prior research investigations. [Raymond and Gabriel \(2023\)](#) conducted a study which revealed a significant association between the working environment of early childhood education institutions and various factors such as job satisfaction among kindergarten instructors, the attitudes of individual kindergarten teachers towards their jobs, and the social recognition of teachers' professionalism.

Further, [Carmel et al. \(2021\)](#) identified several factors that influence educational outcomes, including the operational characteristics of educational facilities, the role of principals, interactions with fellow teachers, and the involvement of parents. There have been suggestions proposing that the concept under consideration could potentially be defined by a variety of criteria, encompassing the complex dynamics of human interactions with individuals, among other factors. [Baptiste \(2019\)](#) asserts that sports programmes offer educators a valuable means to enhance their skills and enhance their job efficacy. When educators engage in extracurricular activities, they are likely to experience a level of job satisfaction that is appropriate, which in turn can contribute to improved performance in a logical manner. [Diaz et al. \(2019\)](#) assert that the role of sports in promoting

mental relaxation and improving cognitive abilities holds great significance. Cultivating a proactive mindset towards work and providing reliable opportunities for job execution may yield benefits.

## 5. Conclusion

The findings of the study indicate that the leadership of the director, the educational environment, teacher efficacy, and extracurricular sports programmes have a significant impact on the job satisfaction of kindergarten teachers. The findings of this study indicate that the leadership exhibited by directors plays a significant role in fostering the development of teachers' competency and psychological stability. These factors, in turn, have a positive impact on teachers' job performance, ultimately influencing their level of job satisfaction. The leadership of the director plays a crucial role in enhancing job satisfaction and improving performance among kindergarten teachers, thereby allowing them to effectively showcase their educational qualifications and teaching skills. Moreover, the findings of this study indicate that kindergarten teachers are more likely to have a positive evaluation of their job when they possess a high level of teacher efficacy and engage in interactions with children with enthusiasm and an active approach. This enables them to effectively showcase their skills and experience job satisfaction.

## 6. Theoretical and Practical Implications

This research presents new implications that were not previously reported in existing studies. The study found that the leadership of directors has a significant impact on the job satisfaction of kindergarten teachers. This relationship has not been examined in previous studies, making it a unique contribution to the existing body of knowledge. This study also established that the educational environment significantly influences the job satisfaction of kindergarten teachers. This relationship, like the first confirmed relationship, was also absent in the existing literature. Therefore, this study contributes to filling a knowledge gap in the field. The literature suggests that teacher efficacy is an important factor in determining job satisfaction among kindergarten teachers. This relationship within the realm of knowledge is also unique. This research has newly confirmed the relationship between extracurricular sports programmes and job satisfaction among kindergarten teachers. The study has uncovered novel relationships that were not previously reported in earlier studies.

The research has practical implications that align with its theoretical significance. The study emphasised the importance of directors in influencing the job satisfaction of kindergarten teachers. The directors are accountable for effectively managing their work and have the ability to establish policies and allocate work responsibilities to enhance productivity. The study suggests that enhancing the educational environment in kindergarten centres is necessary for the advancement of education. The study emphasised the importance of teacher efficacy as a reliable and significant factor influencing job satisfaction. Therefore, it is imperative to develop policies that enhance teachers' job satisfaction and well-being in order to improve their overall work performance. The study found that extracurricular sports programmes significantly enhance teachers' job satisfaction. Therefore, engaging in sports can be beneficial for the positive development of individuals' mental health, ultimately enhancing their sports performance.

#### **Future Directions**

The research outcomes have significant theoretical and practical implications. The study's findings have certain

limitations that should be addressed in future research. This study's data collection was limited to one region. However, future studies should aim to collect data from multiple countries or geographic areas in order to enhance the generalizability of their findings. Additionally, the data in this study was collected using a structured Likert scale questionnaire. Future studies should incorporate qualitative data to examine the unstructured observations of teachers' job satisfaction. This approach would provide valuable insights into the subject matter. This study solely examined the direct relationships between the variables, without considering other potentially influential variables. Future studies should investigate the mediating role of teachers' mental health in this model to further discuss the findings in a comprehensive manner. These instructions would be beneficial for the research to arrive at its conclusions.

#### **Financial Disclosure**

This paper was supported by the Sehan University Research Fund in 2023.

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