



JOB SATISFACTION AND LIFE SATISFACTION AMONG PRESCHOOL TEACHERS: THE MEDIATING ROLE OF PSYCHOLOGICAL DISTRESS AND THE MODERATING EFFECT OF CAREER STAGE

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Abstract

This study examined the relationship between job satisfaction and life satisfaction among preschool teachers, focusing on the mediating role of psychological distress and the moderating role of the career stage. Data from preschool teachers were analyzed using structural equation modeling (SEM) with a multiple mediation framework including anxiety, depression, and stress. Job satisfaction showed a significant positive association with life satisfaction both directly and indirectly. Among the mediators, stress emerged as the only significant pathway linking job satisfaction to life satisfaction, whereas anxiety and depression did not independently predict life satisfaction when modeled simultaneously. The model explained 35% of the variance in life satisfaction. Multi-group analyses further revealed that these relationships differed across career stages: the direct effect of job satisfaction on life satisfaction was strongest among early-career teachers, while emotional factors became more salient in later career stages. These findings suggest that occupational satisfaction influences overall well-being through both direct evaluative mechanisms and stress-related pathways, and that these processes evolve across professional development. The study highlights the importance of reducing workplace stress and supporting teachers' psychological health to enhance both professional functioning and life satisfaction.

Keywords: Job satisfaction, life satisfaction, preschool teachers, psychological distress, mediation, structural equation modeling.



INTRODUCTION

Educational institutions constitute a fundamental pillar of social development, and the professionals who work within them play a crucial societal role. Teachers, administrators, and other educational staff contribute directly to the formation of future generations, and their professional well-being helps shape educational quality, student outcomes, and broader societal progress (Klassen & Chiu, 2010; OECD, 2020). Among the determinants of educational effectiveness, the job satisfaction of educational personnel has emerged as a central factor because it is closely linked to motivation, professional engagement, and psychosocial well-being. Employees who experience higher levels of job satisfaction tend to demonstrate greater effectiveness, creativity, and commitment, which in turn enhance instructional quality and learning environments (Judge et al., 2001; Skaalvik & Skaalvik, 2011). Conversely, low satisfaction may reduce enthusiasm for professional duties and negatively affect educational outcomes (Bakker & Demerouti, 2007; Hoy & Hoy, 2001; Schwarzer & Hallum, 2008).

Within the education sector, the quality of preschool education is particularly sensitive to teacher well-being. Preschool teachers operate in emotionally demanding environments, interacting continuously with young children and their families while managing developmental, pedagogical, and relational responsibilities. Such conditions may increase the risk of emotional exhaustion and burnout, which can impair both teacher performance and children's developmental outcomes (Maslach et al., 2001; Skaalvik & Skaalvik, 2017). In early childhood settings, teacher well-being is particularly critical, as it directly influences the quality of teacher–child interactions, classroom climate, and children's socio-emotional and cognitive development (Hamre & Pianta, 2001; Pianta et al., 2012). Moreover, lower levels of job satisfaction and well-being among teachers have been associated with reduced instructional quality, lower engagement, and less effective classroom management (Bakker & Demerouti, 2007; Schwarzer & Hallum, 2008). Consequently, understanding the factors that shape job satisfaction in preschool educators is essential for improving educational systems and supporting early childhood development.

International research indicates that organizational and psychosocial factors play a key role in shaping teacher satisfaction. For example, social support and a psychologically safe work environment have been shown to enhance job satisfaction among teachers across European contexts (Van Droogenbroeck & Spruyt, 2015). Leadership style also appears influential: democratic leadership has been associated with increased satisfaction among teachers in China (Liu & Onwuegbuzie, 2012), while transformational leadership practices in the United States have been linked to professional growth and improved work climate perceptions (Bogler, 2001). Structural factors such as salary and working conditions likewise contribute significantly to teachers' professional well-being, as emphasized in the OECD's report (OECD, 2020). Collectively, these findings suggest that teacher satisfaction is shaped by a multidimensional interplay of individual, organizational, and contextual variables.

From a theoretical perspective, job satisfaction is commonly conceptualized as an individual's subjective evaluation of their work and work environment, reflecting the degree to which expectations and needs are fulfilled (Locke, 1976). Classic motivational frameworks, including Maslow's hierarchy of needs and Herzberg's two-factor theory, remain influential in explaining this construct. Herzberg and colleagues (1959) proposed that motivational factors such as recognition and growth opportunities enhance satisfaction, whereas hygiene factors, including salary and working conditions, primarily prevent dissatisfaction. Empirical research consistently demonstrates that job satisfaction is associated with organizational performance, employee retention, and psychological well-being (Judge et al., 2001). One of the most widely used instruments for measuring this construct is the Minnesota Satisfaction Questionnaire (Weiss et al., 1967), which assesses multiple dimensions of employees' perceptions of their work environment.

Beyond organizational outcomes, job satisfaction is closely linked to broader life satisfaction. One of the dominant theoretical explanations for this relationship is the spillover hypothesis, which proposes that emotional experiences in one life domain transfer into another (Bowling et al., 2010; Heller et al., 2002). Accordingly, positive or negative experiences at work may influence personal well-being, and vice versa. Although numerous studies have examined this association, most empirical evidence stems



from Western contexts and is largely correlational, leaving causal mechanisms insufficiently understood (Diener & Tay, 2012; Rain et al., 1991). Scholars have therefore suggested that psychological factors may mediate the relationship between job and life satisfaction (Judge & Watanabe, 1993; Rode, 2004).

Mental health indicators such as depression, anxiety, and stress represent potential mediating mechanisms in this process. Research shows that low job satisfaction is associated with higher levels of depressive symptoms, occupational stress, and emotional exhaustion, which may undermine both psychological functioning and work performance. Studies conducted in Azerbaijan similarly indicate that job alienation and workplace stress are linked to depressive symptoms and reduced professional satisfaction (Imanova, 2022; Novruzov, 2022). Evidence from broader international literature also demonstrates that work stress, work–family conflict, psychological violence, and negative team relations can significantly reduce job satisfaction and well-being (Modaresnezhad, 2021). Furthermore, anxiety has been shown to function as a mediator between workplace conditions and satisfaction outcomes in various professional groups (Soltani et al., 2024; Rigas et al., 2024).

Despite this growing body of research, several gaps remain. First, relatively little is known about the psychosocial mechanisms linking job satisfaction and life satisfaction in educational contexts within non-Western settings. Second, few studies simultaneously examine depression, anxiety, and stress as potential mediators within a unified model. Addressing these gaps may provide a more comprehensive understanding of how occupational experiences shape overall well-being among educators.

In recent years, Structural Equation Modeling (SEM) has become a widely used analytical approach in social and educational research due to its ability to simultaneously examine complex relationships among multiple variables, including both direct and indirect effects (Almeida, 2024). SEM enables researchers to test theoretically grounded models by integrating measurement and structural components within a single framework.

Compared to traditional regression techniques, SEM allows for the modeling of latent constructs and the estimation of multiple interrelated dependencies, making it particularly suitable for studying psychological processes such as job satisfaction, psychological distress, and life satisfaction. Moreover, recent studies have emphasized the increasing application of SEM in educational contexts to better understand factors influencing teacher performance and well-being (Alamer, 2025).

Accordingly, the present study adopts a structural equation modeling approach to examine both the direct and indirect pathways linking job satisfaction to life satisfaction, as well as the moderating role of career stage.

Accordingly, the present study aims to examine the association between job satisfaction and life satisfaction among preschool teachers, with particular attention to the mediating role of depression, anxiety, and stress, and to test whether these structural relations vary across career stages. By integrating organizational, demographic, and psychological variables within a single analytical framework, this research seeks to contribute both to the literature on teacher well-being and to the development of evidence-based human resource and educational policies.

Literature review and theoretical background

The relationship between job satisfaction and life satisfaction has been extensively examined in the literature, with consistent evidence suggesting a positive association between these constructs (Diener et al., 1999; Judge et al., 2001). The Bottom-Up Spillover Theory posits that satisfaction in specific life domains, such as work, contributes cumulatively to overall life satisfaction (Diener, 1984; Heller et al., 2002). Within this framework, job satisfaction is considered a critical determinant of general well-being.

In occupational contexts, the Job Demands–Resources Model provides a useful explanation for how workplace conditions influence psychological outcomes (Demerouti et al., 2007). According to this model, job resources—such as positive work experiences and satisfaction—can reduce psychological strain, whereas job demands may increase stress and burnout.



Empirical studies have demonstrated that job satisfaction is negatively associated with psychological distress indicators, including stress, anxiety, and depression, which in turn influence life satisfaction (Bakker & Demerouti, 2007; Schwarzer & Hallum, 2008). However, findings regarding the relative contribution of these mediators remain mixed, with some studies highlighting stress as a more proximal predictor of well-being outcomes (Skaalvik & Skaalvik, 2017; Modaresnezhad, 2021).

Additionally, career development perspectives suggest that work-related experiences and their psychological consequences may vary across different stages of professional life (Super, 1980; Zacher & Frese, 2011). Despite this, limited research has examined how the structural relationships among job satisfaction, psychological distress, and life satisfaction differ across career stages.

Contribution of the Study

This study contributes to the educational and psychological literature in several ways. First, it extends existing research by examining the simultaneous effects of multiple psychological distress variables within a unified structural model (Preacher & Hayes, 2008). Second, by employing a structural equation modeling approach, the study provides a more comprehensive understanding of the mechanisms linking job satisfaction to life satisfaction (Kline, 2016). Third, the inclusion of a career stage as a moderator offers novel insights into how these relationships evolve across professional development (Zacher & Frese, 2011).

From a practical perspective, the findings offer important implications for educational systems, highlighting the need for targeted interventions to reduce stress and enhance teacher well-being, particularly at different stages of career development (OECD, 2020). Such insights are critical for improving both teacher effectiveness and early childhood educational outcomes (Hamre & Pianta, 2001).

Aim of the study

The aim of this study is to examine the relationship between job satisfaction and life satisfaction among preschool teachers, focusing on the mediating role of psychological distress (depression, anxiety, and stress) and the moderating role of career stage.

- H₁.** Job satisfaction will be positively associated with life satisfaction among preschool teachers.
- H₂.** Job satisfaction will be negatively associated with psychological distress (depression, anxiety, and stress).
- H₃.** Psychological distress will be negatively associated with life satisfaction.
- H₄.** Psychological distress will mediate the relationship between job satisfaction and life satisfaction.
- H₅.** Career stage will moderate the structural relationships among job satisfaction, psychological distress, and life satisfaction, such that the strength of these direct and indirect effects differs across early-, mid-, and late-career teachers.

METHOD

The present study is grounded in a mediation framework examining the relationship between job satisfaction and life satisfaction, with psychological distress variables (anxiety, depression, and stress) as mediators. This conceptualization is informed by well-established theoretical perspectives suggesting that individuals' evaluations of their work domain can extend to broader life evaluations, both directly and through emotional and psychological processes.

From a theoretical standpoint, the model draws on the Bottom-Up Spillover Theory, which posits that satisfaction within specific life domains (e.g., work) contributes to overall life satisfaction through cumulative effects across domains (Diener, 1984; Diener et al., 1999). In addition, the model is consistent with the Job Demands–Resources Model, which suggests that job-related resources (e.g., satisfaction, positive work experiences) can reduce psychological strain and enhance well-being outcomes (Demerouti et al., 2001; Bakker & Demerouti, 2007).



Psychological distress is conceptualized as a key mechanism through which job satisfaction influences life satisfaction. Prior research indicates that lower job satisfaction is associated with higher levels of stress, anxiety, and depression, which in turn negatively affect individuals' global evaluations of life (e.g., Diener et al., 1999; Bakker & Demerouti, 2007). Based on this evidence, it is expected that job satisfaction will exert both a direct effect on life satisfaction and indirect effects through psychological distress.

Furthermore, the study incorporates the career stage as a moderator, recognizing that the strength and nature of these relationships may vary across professional development stages. This assumption aligns with lifespan and career development perspectives, which suggest that individuals' work-related experiences and their psychological consequences evolve over time.

Overall, the proposed model integrates direct and indirect pathways, allowing for a comprehensive examination of how job satisfaction contributes to life satisfaction through both evaluative and emotional mechanisms.

Participants and procedure

Participants were recruited using a non-probability convenience sampling strategy. Specifically, preschool teachers working in various educational institutions across Azerbaijan were invited to participate through professional networks, institutional contacts, and online communication channels (e.g., email and social media groups for educators). Participation was voluntary, and data were collected through an online survey platform. Inclusion criteria required participants to be currently employed as preschool teachers and to provide informed consent prior to participation.

The study included 266 preschool teachers from Azerbaijan who completed the survey. Participants ranged in age from 22 to 67 years ($M = 43.89$, $SD = 10.34$). For moderation analyses, participants were categorized into three career stages based on years of work experience: Early career (1–10 years; $n = 114$), Mid-career (11–30 years; $n = 95$), and Late career (30+ years; $n = 57$). Detailed sociodemographic characteristics are presented in Table 1.

Table 1 presents the demographic and occupational characteristics of the sample, including marital status, number of children, health condition, income satisfaction, working hours, and career stage distribution.

Table 1. Participant characteristics ($n = 266$).

Variable	Category	n	%
Age	Mean (SD)	43.89 (10.34)	Range: 22–67
Marital status	Married	149	56.0
	Single	117	44.0
Children	None	17	6.4
	One	48	18.0
	Two or more	201	75.6
Health problems	Yes	58	21.8
	No	208	78.2
Income satisfaction	Satisfied	207	77.8
	Not satisfied	59	22.2
Working hours/day	3–5 hours	29	10.9
	6–8 hours	229	86.1
	9–10 hours	8	3.0
Career stage	Early (1-10 years)	114	42.9
	Middle (11-30 years)	95	35.7
	Late (30+ years)	57	21.4



As shown in Table 1, the sample consisted predominantly of married participants (56.0%), with the majority reporting having two or more children (75.6%). Most participants indicated no health problems (78.2%) and reported being satisfied with their income (77.8%). In terms of working conditions, the vast majority worked 6–8 hours per day (86.1%), reflecting a relatively standardized workload among preschool teachers. Regarding career stage distribution, the largest group was early-career teachers (42.9%), followed by mid-career (35.7%) and late-career participants (21.4%), ensuring adequate representation across different stages of professional development. Overall, the sample reflects a diverse range of demographic and occupational characteristics relevant to the study aims.

All participants provided informed consent before participation. Responses were anonymous and used solely for research purposes.

Ethics

The study followed the ethical principles of the Declaration of Helsinki and obtained approval from the Ethics Committee of the (blinded for review) (Approval No. T-765). Participants were fully informed about the study procedures and provided written informed consent prior to participation.

Data Collection Tools

The Depression, Anxiety, and Stress Scale (DASS-21) was created by Lovibond and Lovibond (1995). The 21-item scale was broken down into three sub-dimensions: stress, anxiety, and depression. For example, depression might be described as the inability to feel anything positive at all. Using a 4-point Likert scale, the DASS-21 rates negative emotional symptoms (0 = never applied to me, 3 = frequently or heavily applied to me) For the depression subscale, anxiety subscale, and stress subscale, respectively, the Cronbach alpha internal consistency reliability coefficient in the clinical sample is .87, .85, and .81. The Cronbach's Alpha coefficient in this research is .79.

Job Satisfaction Scale (Hackman & Oldham, 1975) is a widely used tool to measure an individual's job satisfaction. The Job Satisfaction Scale consists of 14 items, such as the nature of management in the workplace. Participants respond to each statement on a 5-point Likert-type scale, ranging from 1 ("It does not satisfy me at all") to 5 ("It satisfies me very much"). Cronbach's alpha of this scale is .95. The Cronbach's Alpha coefficient in this research is .87.

Satisfaction with Life Scale (SWLS) was developed by Diener et al. (1985). The SWLS is a brief 5-item questionnaire used to assess overall cognitive judgments of life satisfaction. Respondents often just have to spend one-minute answering questions using a Likert scale. This scale is appropriate for adults from a variety of backgrounds because the questions are open-ended. Use in non-clinical groups is where it is most suitable. A 6-point Likert scale is used by SWLS to evaluate life satisfaction. According to the reliability study of the SWLS, there was .74 Cronbach's alpha internal consistency. The Cronbach's Alpha coefficient in this research is .72.

Data analysis

Data were analyzed in R. Raw data were imported from SPSS (.sav) format using the haven package and screened for missingness. Composite variables (job satisfaction, life satisfaction, anxiety, depression, and stress) were computed as mean scores (MEAN variables). Descriptive statistics (M, SD, skewness, kurtosis) were obtained using the psychpackage. Bivariate associations among study variables were examined using Pearson correlation coefficients.

To test the hypothesized multiple mediation model, structural equation modeling (SEM) was conducted using the lavaanpackage. Job satisfaction was specified as the predictor, life satisfaction as the outcome, and anxiety, depression, and stress as parallel mediators. Covariances among the mediators were freely estimated. Indirect effects (specific and total) and the total effect were evaluated using nonparametric bootstrapping with 2000 resamples, and statistical inference was based on bootstrap percentile 95% confidence intervals (CIs). Because the structural model was just-identified ($df = 0$), global model fit indices (e.g., CFI, RMSEA, SRMR) were not informative; therefore, interpretation focused on parameter estimates and bootstrap CIs. Standardized estimates (β) and explained variance (R^2) were reported for endogenous variables.



Moderation by work experience was examined via multi-group SEM. Participants were categorized into three career stages (Early, Mid, Late) based on years of work experience. A model allowing regression paths to vary freely across groups was compared with a model constraining all regression paths to equality across groups. Group differences were evaluated using the robust chi-square difference test, with statistical significance set at $p < .05$.

RESULTS

As shown in Table 2, job satisfaction was moderately positively correlated with life satisfaction and negatively correlated with anxiety, depression, and stress. In turn, all three distress indicators were negatively associated with life satisfaction and positively intercorrelated.

Structural model: Multiple mediator model

We tested a multiple mediation model in which job satisfaction predicted life satisfaction both directly and indirectly through anxiety, depression, and stress. Covariances among the three mediators were freely estimated.

Because the structural model was just-identified ($df = 0$), global fit indices (e.g., CFI, RMSEA, SRMR) were not informative; therefore, interpretation focused on parameter estimates and bootstrap confidence intervals.

Table 2. Descriptive statistics and correlations.

Variable	Mean	Std.Dev.	Skewness	Kurtosis	1	2	3	4	5
Job satisfaction	3.68	.68	-.62	.64	—				
Life satisfaction	4.91	1.20	-.26	-.30	.466	—			
Anxiety	.49	.47	1.38	2.24	-.339	-.253	—		
Depression	.44	.44	1.83	4.75	-.332	-.366	.555	—	
Stress	.86	.63	.88	.29	-.422	-.507	.588	.584	—

Note. Correlations $> |.12|$ are significant at $p < .05$ with this sample size.

Table 2 presents the descriptive statistics and bivariate correlations among the study variables. Job satisfaction ($M = 3.68$, $SD = .68$) and life satisfaction ($M = 4.91$, $SD = 1.20$) showed moderate variability and approximately normal distributions, with slight negative skewness indicating a tendency toward higher scores. In contrast, anxiety and depression demonstrated positive skewness and elevated kurtosis, suggesting that lower levels of these symptoms were more common in the sample, with a smaller proportion of participants reporting higher levels. Stress showed a moderate positive skew but remained within acceptable distributional limits.

In terms of associations, job satisfaction was positively correlated with life satisfaction ($r = .466$, $p < .05$) and negatively correlated with anxiety ($r = -.339$), depression ($r = -.332$), and stress ($r = -.422$), indicating that higher job satisfaction is linked to better overall well-being and lower psychological distress. Life satisfaction was also negatively associated with anxiety ($r = -.253$), depression ($r = -.366$), and stress ($r = -.507$), with the strongest relationship observed for stress. Additionally, anxiety, depression, and stress were all positively intercorrelated (r range = $.555$ – $.588$), reflecting the common co-occurrence of psychological distress indicators.

Consistent with the threshold for statistical significance in this sample ($|r| > .12$, $p < .05$), all reported correlations were statistically significant.

**Direct effects****Table 3.** Structural model standardized path estimates.

Path	β	95% CI	p
Job satisfaction → Anxiety	-.339	[-.463, -.214]	<.001*
Job satisfaction → Depression	-.332	[-.458, -.205]	<.001*
Job satisfaction → Stress	-.422	[-.553, -.290]	<.001*
Job satisfaction → Life satisfaction	.311	[.169, .453]	<.001*
Anxiety → Life satisfaction	.149	[-.012, .313]	.074
Depression → Life satisfaction	-.113	[-.298, .064]	.109
Stress → Life satisfaction	-.396	[-.560, -.247]	<.001*

*p < .05

Table 3 presents the standardized path coefficients from the structural model. Job satisfaction emerged as a significant negative predictor of all three indicators of psychological distress, including anxiety ($\beta = -.339$, $p < .001$), depression ($\beta = -.332$, $p < .001$), and stress ($\beta = -.422$, $p < .001$), indicating that higher job satisfaction is associated with lower levels of distress. When controlling for the mediators, job satisfaction remained a significant positive predictor of life satisfaction ($\beta = .311$, $p < .001$), suggesting a robust direct effect.

Among the mediators, only stress demonstrated a significant association with life satisfaction ($\beta = -.396$, $p < .001$), indicating that higher stress is linked to lower life satisfaction. In contrast, the effects of anxiety ($\beta = .149$, $p = .074$) and depression ($\beta = -.113$, $p = .109$) were not statistically significant when included simultaneously in the model, suggesting that their unique contributions to life satisfaction are limited after accounting for shared variance with stress.

Overall, the model explained a substantial proportion of variance in life satisfaction ($R^2 = .350$), while explaining smaller but meaningful proportions of variance in anxiety ($R^2 = .115$), depression ($R^2 = .110$), and stress ($R^2 = .178$). These findings highlight stress as the primary pathway linking job satisfaction to life satisfaction within the model.

Table 4 presents the results of the bootstrapped indirect effects analysis (2,000 resamples, percentile confidence intervals). The total indirect effect of job satisfaction on life satisfaction through the three mediators was statistically significant ($\beta = .274$, $p < .001$), indicating that psychological distress variables jointly transmit part of the effect of job satisfaction on life satisfaction.

Indirect effects (bootstrapping)

When examining the specific indirect pathways, only the indirect effect via stress was significant ($\beta = .296$, $p < .001$), suggesting that stress serves as the primary mediating mechanism linking job satisfaction to life satisfaction. In contrast, the indirect effects through anxiety ($\beta = -.089$, $p = .121$) and depression ($\beta = .066$, $p = .144$) were not statistically significant, as their confidence intervals included zero.

**Table 4.** Results of indirect effects.

Effect	Estimate	95% CI	p
Anxiety	-.089	[-.221, .009]	.121
Depression	.066	[-.023, .155]	.144
Stress	.296	[.175, .435]	<.001*
Indirect	.274	[.163, .392]	<.001*
Total effect	.824	[.594, 1.079]	<.001*

*p < .05

Additionally, the total effect of job satisfaction on life satisfaction was significant ($\beta = .824, p < .001$), indicating a strong overall association. Taken together, these findings support a **partial mediation model**, in which job satisfaction influences life satisfaction both directly and indirectly, primarily through its effect on stress.

Moderation by work experience (multi-group analysis)

To examine whether work experience moderated the structural relations, participants were classified into three career-stage groups based on years of work experience: Early ($n = 114$), Mid ($n = 95$), and Late ($n = 57$). A multi-group SEM allowing regression paths to vary freely across groups was compared with a model constraining all regression paths to equality across groups. The comparison indicated that constraining the paths significantly worsened model fit: $\Delta\chi^2(14) = 39.008, p = .00036$.

Table 5. Multi-group standardized paths (moderation by work experience).

Path	Early β	Mid β	Late β
Job \rightarrow Life satisfaction	.457*	.226	.057
Stress \rightarrow Life satisfaction	-.473*	-.556*	-.136
Depression \rightarrow Life satisfaction	.023	.016	-.466*

Note. *p < .05, **p < .01, ***p < .001

The freely estimated multi-group model demonstrated a significantly better fit than the constrained model, indicating that at least some structural paths differed across career stages. Inspection of standardized estimates presented in Table 5 showed that the direct association between job satisfaction and life satisfaction was strongest in the Early group ($\beta = .457, p < .001$), smaller in the Mid group ($\beta = .226, p = .062$), and non-significant in the Late group ($\beta = .057, p = .701$).

These findings suggest that the psychological mechanisms linking job satisfaction to life satisfaction may vary across different stages of career development.

Stress was a significant negative predictor of life satisfaction in both the Early ($\beta = -.473, p < .001$) and Mid ($\beta = -.556, p < .001$) groups, but not in the Late group ($\beta = -.136, p = .436$). In contrast, depression showed a significant negative association with life satisfaction in the Late group ($\beta = -.466, p < .001$), while this path was not significant in the Early or Mid-groups.

The pattern of coefficients is visually summarized in Figure 1, which illustrates the career-stage differences in both direct and indirect pathways linking job satisfaction to life satisfaction. As shown in the Figure 1, job satisfaction consistently predicted lower psychological distress across all groups; however, the pathways through which job satisfaction translated into life satisfaction differed by career stage.

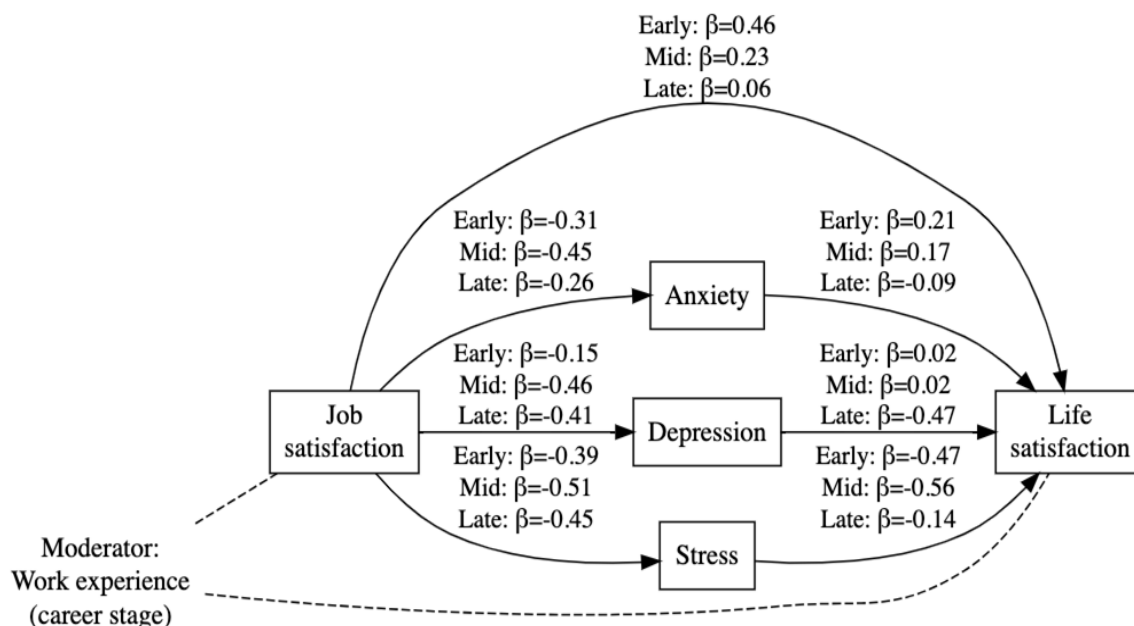


Figure 1. Multi-group structural model of job satisfaction predicting life satisfaction via psychological distress across career stages.

In earlier career phases, job satisfaction contributed to life satisfaction both directly and indirectly through reduced stress, suggesting that work-related experiences may play a more central role in shaping overall well-being at this stage. In mid-career participants, stress remained the dominant mechanism linking job satisfaction to life satisfaction, whereas the direct effect of job satisfaction weakened.

In contrast, in the late-career group, depression emerged as the primary pathway associated with life satisfaction, while the effects of job satisfaction and stress were substantially attenuated. This shift suggests that emotional adjustment processes may become more relevant for overall well-being in later career stages than direct work-related satisfaction.

Taken together, these findings indicate that work experience functions as a meaningful moderator of the psychological processes linking job satisfaction to life satisfaction, with different mechanisms predominating at different career stages.

DISCUSSION, CONCLUSION, and RECOMMENDATIONS

The present study investigated the relationship between job satisfaction and life satisfaction among preschool teachers and examined whether psychological distress (anxiety, depression, and stress) mediated this association. In addition, the study explored whether these structural relationships varied across career stages. The findings provide several important insights into the psychological mechanisms linking occupational experiences to broader well-being.

Consistent with previous research, job satisfaction showed a moderate positive association with life satisfaction, indicating that teachers who experience greater fulfillment in their professional roles also tend to evaluate their lives more positively. This supports theoretical perspectives suggesting that work constitutes a central life domain whose emotional consequences extend beyond the workplace (Judge & Watanabe, 1993; Diener & Tay, 2012). The persistence of a significant direct path from job satisfaction to life satisfaction after controlling for psychological distress suggests that occupational



evaluations contribute independently to global well-being judgments, rather than operating solely through mental health pathways.

The results further demonstrated that job satisfaction was negatively associated with all three indicators of psychological distress—*anxiety, depression, and stress*—indicating that higher occupational satisfaction is linked to lower emotional strain. This finding aligns with occupational well-being frameworks such as the Job Demands–Resources model, which posits that adequate work resources protect employees from psychological exhaustion and emotional difficulties (Bakker & Demerouti, 2007; Warr, 2007). In emotionally demanding professions such as early childhood education, this protective function of job satisfaction may be particularly salient.

However, when examining the mediational pathways, only stress emerged as a significant predictor of life satisfaction and as a statistically significant mediator. Anxiety and depression did not independently predict life satisfaction when included simultaneously in the model. This pattern suggests that, in the present sample, stress may represent the most proximal psychological mechanism through which occupational experiences translate into broader well-being outcomes. One possible interpretation is that stress reflects the immediate cognitive and physiological burden of professional demands, whereas anxiety and depressive symptoms may represent more distal or generalized emotional states. Similar findings have been reported in studies showing that perceived stress is often more strongly linked to daily functioning and subjective well-being than broader affective symptoms (Lovibond & Lovibond, 1995; Wang & Hall, 2019).

The significant total indirect effect indicates that psychological distress collectively contributes to the relationship between job satisfaction and life satisfaction, yet the decomposition of effects highlights that this process is primarily driven by stress. Thus, the present findings point toward a partial mediation model, in which job satisfaction influences life satisfaction both directly and indirectly through reduced stress. This dual pathway is consistent with integrative well-being models proposing that occupational satisfaction affects both evaluative judgments and emotional functioning.

A major contribution of this study lies in the multi-group analyses examining career-stage differences. The results indicated that the structural pathways linking job satisfaction, psychological distress, and life satisfaction were not invariant across career stages. Specifically, the direct association between job satisfaction and life satisfaction was strongest among early-career teachers, weaker in mid-career participants, and non-significant among late-career teachers. This pattern suggests that work experiences may play a particularly central role in shaping overall well-being during the early stages of professional development, when occupational identity, career expectations, and future prospects are still forming.

The mediational mechanisms also varied across career stages. Stress was a strong predictor of life satisfaction in early and mid-career groups but not among late-career teachers, whereas depression became the dominant predictor of life satisfaction in the late-career group. This shift may reflect developmental changes in the psychological meaning of work. Early in a career, well-being may be strongly tied to workload management, role adaptation, and daily professional pressures, making stress a key explanatory factor. In contrast, in later career stages, broader emotional evaluations and cumulative experiences may become more relevant for overall well-being, increasing the importance of depressive symptoms. These findings align with lifespan perspectives suggesting that the determinants of well-being evolve across career trajectories as individuals' priorities and coping resources change.

Taken together, the findings suggest that job satisfaction is an important but not uniform predictor of life satisfaction among preschool teachers. Its effects appear to operate through both direct evaluative pathways and stress-related emotional mechanisms, while the relative importance of these processes varies across career stages. From a practical perspective, these results imply that interventions aimed at improving teacher well-being may need to be tailored to career phase. For early-career teachers, strategies that reduce occupational stress and enhance role clarity may be particularly effective, whereas



for more experienced teachers, attention to emotional support and psychological health may be more critical.

Overall, the present study contributes to the literature by demonstrating that the link between job satisfaction and life satisfaction is both psychologically mediated and developmentally contingent. By integrating mediation and moderation within a single analytical framework, the findings provide a more nuanced understanding of how occupational experiences shape overall well-being among educators.

Conclusion

This study demonstrated that job satisfaction is positively associated with life satisfaction among preschool teachers, with this relationship operating both directly and indirectly through psychological distress. Among the examined mediators, stress emerged as the primary pathway linking occupational experiences to overall well-being. Moreover, the multi-group analyses indicated that these relationships vary across career stages, suggesting that the psychological mechanisms connecting work and life satisfaction are developmentally contingent. Overall, the findings highlight the importance of reducing workplace stress and supporting teachers' psychological well-being as key strategies for enhancing both professional functioning and life satisfaction.

From a research perspective, future studies should further investigate the dynamic interplay between job satisfaction and well-being using longitudinal and dyadic designs, as well as explore additional contextual and organizational factors (e.g., institutional climate, leadership styles, and social support) that may strengthen or buffer these relationships. From a practical standpoint, educational institutions should prioritize interventions aimed at stress reduction, such as workload management, psychological support programs, and professional development initiatives tailored to different career stages. Such evidence-based strategies may not only improve teachers' well-being but also contribute to more sustainable and effective educational environments.

Limitations and recommendations

Despite its contributions, the present study has several limitations that should be considered when interpreting the findings. First, the cross-sectional design limits the ability to draw causal conclusions regarding the directionality of relationships among job satisfaction, psychological distress, and life satisfaction. Longitudinal studies are needed to determine whether changes in job satisfaction lead to subsequent changes in well-being over time.

Second, all variables were measured using self-report instruments, which may introduce common method bias and shared variance among constructs. Third, the sample consisted exclusively of preschool teachers, which may limit the generalizability of the findings to other educational levels or occupational groups. Future research should examine whether similar mediational mechanisms operate among primary, secondary, or higher education teachers, as well as in non-educational professions.

Future studies may also consider expanding the model by including additional organizational variables, such as leadership style, organizational climate, or perceived support, as well as personal resources such as resilience or coping strategies. Such extensions could provide a more comprehensive understanding of how workplace conditions interact with individual psychological processes to shape teachers' well-being across their careers.

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Ethics and Conflict of Interest

The study followed the ethical principles of the Declaration of Helsinki and obtained approval from the Ethics Committee of the (blinded for review) (Approval No. T-765). Participants were fully informed about the study procedures and provided written informed consent prior to participation. The authors declare that there are no conflicts of interest regarding the publication of this paper.



Author Contribution

Ulkar Zalova-Nuriyeva contributed to conceptualization, methodology, supervision, writing—original draft, and project administration. Sevil Abbasova contributed to data curation and writing—review & editing. Nigar Asgerova contributed to validation and writing—review & editing. Zhala Babazade contributed to visualization and writing—review & editing. Vusala Maharova contributed to data collection, literature review, and writing—review & editing. Chinara Kazimzade contributed to resources and validation. All authors reviewed and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

Data Availability

The data that support the findings of this study are available on request from the corresponding author.

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