

Resilient in Precarity: How Employment Contract Type Moderates the Relationships between Psychological Factors and Music Teachers' Intention to Remain in the Profession

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ABSTRACT This study examines whether music teachers' employment contract type moderates the relationships between psychological factors—work-related flow, self-efficacy, and musical calling—and their intention to remain in the profession. Participants were 293 music teachers (70.9% female) from 55 elementary and upper secondary music schools in Croatia. On average, teachers reported frequent flow experiences, high self-efficacy, strong musical calling, and strong intention to remain in the profession. Preliminary correlational analyses indicated positive associations between all three psychological factors and intention to stay; however, structural equation modelling revealed that only self-efficacy had a significant direct effect. Additionally, holding a full-time permanent contract, compared to a part-time and/or temporary contract, positively predicted intention to remain in the profession. Significant moderation effects were observed between flow and contract type, as well as between self-efficacy and contract type, indicating that the associations with intention to remain were more pronounced among teachers holding part-time and/or temporary contracts compared to those with full-time permanent contracts. The moderation effect of musical calling and contract type was not confirmed. Specifically, the results indicate that self-efficacy, as a personal resource, and flow, conceptualized as an indicator of work engagement within the Job Demands–Resources (JD-R) framework, serve as more salient facilitating factors for music teachers employed under less favourable contract conditions. Accordingly, efforts to strengthen work-related self-efficacy and flow are likely to have a greater impact on music teachers with part-time and/or temporary contracts in supporting their intention to remain in the profession.

Key words: music teachers, flow at work, self-efficacy, musical calling, employment contract, teacher attrition, Job Demands–Resources Theory.

1. Introduction

Teacher shortages have become an increasingly critical global issue, driven in part by the profession's comparatively low social prestige and remuneration, which lag behind those of other sectors (UNESCO & International Task Force on Teachers for Education, 2024). This challenge is also evident in the field of music education across many countries (e.g., Mateos-Moreno, 2025; Hash, 2021). Meta-analytic evidence on teacher attrition identifies multiple correlates of departure, encompassing personal factors (e.g., gender, age), school-level characteristics (e.g., organizational structure, resources), and external conditions (e.g., evaluation systems, salary) (Nguyen et al., 2019). Contemporary research has increasingly focused on psychological work-related constructs and their associations with teachers' intentions to leave (e.g., Fiegenger & Adams, 2023; De Neve & Devos, 2016). Nonetheless, studies specifically addressing music teachers remain limited, particularly those examining the interplay between psychological variables and employment conditions in predicting turnover intentions. Unlike many general classroom teachers, music teachers often maintain dual professional identities as both educators and musicians, making their motivation and sense of professional calling strongly connected to their musical self-concept (e.g., Boyle, 2020). These identity-related characteristics suggest that psychological factors such as work-related flow, self-efficacy, and musical calling may be especially influential in sustaining their professional commitment. This study aims to fill this gap in the literature by examining how music teachers' employment contract type moderates the relationships between work-related flow, self-efficacy, and musical calling on the one hand, and their intention to remain in the profession on the other.

1.1. Theoretical framework

In the past decade, the Job Demands–Resources (JD-R) theory has become a key framework for analysing both beneficial and detrimental work-related outcomes, with particular emphasis on job performance (Bakker & Demerouti, 2017; Van Veldhoven et al., 2020). The theory outlines how job demands and resources shape employee performance primarily through their effects on well-being, while also highlighting how employees actively manage these demands and resources through proactive and reactive strategies (Bakker & Demerouti, 2017; Bakker, Demerouti & Sanz-Vergel, 2014). Job demands—such as workload, time pressure, or stressful events—and resources—such as social support, feedback, and self-efficacy—jointly influence employee well-being, typically conceptualized as work engagement and/or burnout. Generally, high demands undermine well-being, whereas resources enhance it.

Within this theory, a distinction is made between personal and job resources. Personal resources are understood as positive self-perceptions that strengthen individuals' sense of control over and ability to shape their work environment (Bakker, Demerouti

& Sanz-Vergel, 2023). Such resources include self-efficacy, optimism, organizational self-esteem, adaptability, resilience, and emotional skills (e.g., Bakker et al., 2023; Granziera, 2022). By contrast, job resources refer to work-related factors with motivating potential, such as opportunities for career growth, social support, and feedback (Bakker et al., 2023). The present study concentrates on personal resources, specifically self-efficacy and musical calling.

The self-efficacy of music teachers can be defined as their belief in their capacity to positively influence students in the classroom, engage effectively with parents, administrators, and the wider community, and demonstrate resilience when facing challenges (Wagoner, 2015). Musical calling reflects musicians' personal passion, connection, and immersion in musical activities (Burland, Bennett & López-Íñiguez, 2022). Both constructs can be conceptualized as parts of music teachers' personal identity (Wagoner, 2015; Burland et al., 2022): self-efficacy relates more directly to their role as music educators, while musical calling reflects a broader identification with being a musician. In the context of JD-R framework, self-efficacy and musical calling can be considered personal resources that are likely to promote positive outcomes, including well-being, productivity, and ultimately teachers' intention to remain in the profession.

Flow at work is understood as an optimal psychological state characterized by intense absorption and enjoyment in an activity, during which perceptions of time, fatigue, and external distractions recede (Csikszentmihalyi, 2014). It is often described as a short-term peak experience at work, characterized by absorption, enjoyment, and intrinsic motivation (Bakker, 2005). Absorption, in particular, denotes a state of intense focus in which employees are fully immersed in their tasks (Csikszentmihalyi, 2014). Within JD-R theory, flow at work is often conceptualized as a mediator linking resources and demands to professional outcomes, serving as an indicator of work engagement and overall professional well-being (e.g., Ștefan & Virgă, 2025).

Employment contract type could potentially act as a contextual factor that moderates the relationships between job demands, resources, and work outcomes (van den Tooren & de Jong, 2014). While the JD-R framework does not explicitly formulate hypotheses regarding interactions between personal resources (e.g., self-efficacy, musical calling) or flow and contract type, the present study posits that aforementioned psychological factors are likely to interact positively with full-time permanent contract in predicting favourable work-related outcomes, such as the intention to remain in the profession. An interaction effect in this direction would align with Maslow's hierarchy of needs (Maslow, 1943; Hagerty, 1999). Within this framework, a full-time permanent contract can be understood as fulfilling the safety need, which serves as a foundation for the satisfaction of higher-order needs—such as flow, self-efficacy, and musical calling—that are associated with self-actualization. Nonetheless, more recent

research suggests that these needs are not always fulfilled in a strictly sequential order (Rojas, Méndez & Watkins-Fassler, 2023). Furthermore, such a pattern could also be interpreted through the lens of psychological contract theory (Rousseau, 1995; Botha & Steyn, 2021), as a full-time permanent contract may foster greater trust between the employee and the organization, thereby enabling flow, self-efficacy, and musical calling to translate more strongly into career commitment.

1.2. *Previous research*

Research on music teachers' intention to remain in the profession and the psychological factors influencing it is limited. As a result, it is important to also draw on studies involving teachers of other subjects when reviewing the literature.

Previous studies across various teaching specialties have found a positive relationship between flow and teachers' intention to stay in the profession (e.g., Bochoridou et al., 2025; Shim et al., 2022). Extending this line of research, Bochoridou et al. (2025) examined the emotional dimension of work-related flow—specifically, work enjoyment—and found that it mediated the link between perceived overqualification and teachers' intention to leave. Bakker (2005) showed that job resources such as autonomy, performance feedback, social support, and supervisory coaching enhanced music teachers' perceived balance between challenges and skills, thereby promoting flow. Similarly, in a study of Spanish secondary school teachers, Salanova, Bakker and Llorens (2006) found that personal and organizational resources promoted work-related flow, which in turn positively influenced those same resources. Collectively, these findings suggest that resources stimulate flow, which subsequently supports teachers' intentions to remain in the profession.

Research on professional identity and career calling emphasizes their importance in teacher retention. Bennett and Chong (2018) found that pre-service music teachers in Singapore who strongly identified with the role of music teacher were more inclined to pursue long-term teaching careers. Similarly, Yang and Wang (2023) showed that among Chinese English teachers, higher self-efficacy and stronger professional identity were linked to lower attrition. Among K–12 public school teachers in Virginia, career calling had a stronger negative effect on turnover intentions and desires, as well as a stronger positive effect on organizational commitment, than did perceived overqualification (Lobene & Meade, 2013).

Karakus et al. (2021) found that, among Turkish science and mathematics teachers, higher self-efficacy was linked to lower stress, burnout, depression, and intention to leave the profession. Teachers with stronger self-efficacy were less likely to consider leaving, likely due to more positive affective well-being. Similarly, Lopez (2018) reported that job satisfaction, self-efficacy, and collective efficacy were significant pre-

dictors of intention to leave among U.S. primary school teachers. In a study of public secondary school teachers in Saint Petersburg, Maslinsky and Ivaniushina (2016) identified self-efficacy and professional commitment as the strongest predictors of retention, even when accounting for perceived workplace challenges, employment opportunities, and emotional attachment to teaching. Early-career teachers' self-efficacy and affective commitment were also found to directly reduce their intention to leave in Flemish primary schools (De Neve & Devos, 2016). A study of Norwegian senior high school teachers revealed a pathway in which inadequate supervisory support, low student motivation, and value conflicts reduced self-efficacy and engagement, ultimately increasing teachers' motivation to leave the profession (Skaalvik & Skaalvik, 2016). Research generally shows that teachers' self-efficacy is positively related to their intention to remain in the profession. However, Qin and Tao (2021) found that for preservice music teachers in Chinese vocational colleges, perceived behavioural control—covering self-efficacy, skills, and opportunities—did not directly predict this intention. Instead, it influenced intention indirectly through intrinsic motivation, suggesting possible cultural differences in these relationships.

In a rare attempt to extend the JD-R model by considering employment contract as a moderator, van den Tooren and de Jong (2014) proposed that permanent employees typically hold higher expectations regarding job demands and resources and are less easily satisfied with how these are met compared to temporary employees. Consequently, high job demands may have a stronger negative impact, and high resources a weaker positive impact, on the health and well-being of permanent workers. Supporting this view, their findings showed that the negative associations of job insecurity with both job satisfaction and general health were stronger for permanent employees. Contrary to their hypothesis, the positive association between social support and job satisfaction was found to be stronger among permanent employees.

A substantial proportion of teachers leave their initial schools within the first few years of professional entry (Nguyen et al., 2019; UNESCO & International Task Force on Teachers for Education, 2024). While earlier studies suggested that female teachers were more likely than their male counterparts to exit the profession (Nguyen et al., 2019), more recent evidence indicates a reversal of this pattern, with male teachers now exhibiting higher attrition rates (UNESCO & International Task Force on Teachers for Education, 2024). In light of these findings, gender and age may serve as additional covariates when examining the moderating effects of psychological factors and employment contract type on music teachers' intention to remain in the profession.

2. Aim, research questions and hypotheses

This study examines whether employment contract type moderates the relationship between music teachers' work-related psychological factors—flow, self-efficacy, and musical calling—and their intention to remain in the profession.

Based on this aim, I formulated the following three research questions and corresponding hypotheses:

- 1) How are work-related psychological factors—flow, self-efficacy, and musical calling—related to music teachers' intention to remain in the profession?
H1: Work-related psychological factors—namely, flow, self-efficacy, and musical calling—will be positively associated with music teachers' intention to stay in the profession.
- 2) How does the employment contract type relate to music teachers' intention to remain in the profession?
H2: Music teachers employed full-time on a permanent contract will show a higher intention to remain in the profession than those with part-time and/or temporary contract.
- 3) Does the employment contract type moderate the relationship between work-related psychological factors and music teachers' intention to stay in the profession?
H3: The relationship between work-related psychological factors (flow, self-efficacy, and musical calling) and intention to remain in the profession will be stronger among music teachers employed on a full-time permanent contract compared to those with part-time and/or temporary contract.

3. Methodology

3.1. Sample and procedure

The data used in this study were collected as a part of the broader research project "Educational and Career Plans of Youth in Music Education (MUSICPLAN)" that was conducted by the Institute for Social Research in Zagreb. The link to the online questionnaire was sent by e-mail to principals of all elementary and upper secondary music schools in Croatia ($n=96$)¹. The music school principals were asked to forward

¹ In Croatia, elementary music schools function as optional extracurricular programs separate from mandatory primary and lower secondary education. They provide the foundation for progression to upper secondary and higher music education. Programs last six years, with children typically enrolling at age 8–9, alongside third grade of compulsory elementary school. Upper secondary music schools train professional musicians across various profiles. Students usually attend both a music school and another upper secondary institution (grammar or vocational), though some pursue only music school. Certain institutions offer both elementary and upper secondary music programs.

the questionnaire link to all music teachers employed in their respective schools. The data were collected from 293 music teachers (70.9% females; average age 41.8) from 55 music schools from March to May 2025. The completion of the questionnaire was anonymous and voluntary. Participants provided informed consent directly through the online questionnaire. The research was implemented according to the ethical guidelines and was approved by the Ethical Committee of the author's institution.

3.2. Instruments

The questionnaire included several constructs aligned with the objectives and hypotheses of the study. Intention to remain in the music teaching profession was assessed with a single item developed specifically for this study ("How certain are you that you will continue working as a music school teacher?"; 1 = Not at all certain to 10 = Completely certain).

Work-related flow was measured using four items from the absorption subscale of the Work-Related Flow Inventory (WOLF; Bakker, 2008; e.g., "When I am working, I forget everything else around me"; 1 = Never to 7 = Always). This scale had previously been translated into Croatian and validated on a sample of Croatian teachers (Olčar, 2015). Olčar's (2015) principal component analysis of the WOLF data from Croatian teachers indicated that the absorption subscale formed a distinct component.

Work-related self-efficacy was measured with nine items from the self-efficacy subscale of the Music Teacher Identity Scale (MTIS; Wagoner, 2015; e.g., "I can be successful in keeping students engaged with musical activities in my classroom"; 1 = Strongly disagree to 5 = Strongly agree). The research team translated and adapted this subscale for the present study to ensure that the item content reflected the context of Croatian music schools. The translations and adaptations were refined through discussion until consensus was reached.

Musical calling was assessed with six items from the musical calling subscale of the Musical Identity Measure (MIM; Burland et al., 2022; e.g., "The first thing I often think about when I describe myself to others is that I'm involved in music"; 1 = Strongly disagree to 7 = Strongly agree). Similarly, this subscale was translated and adapted by the research team to align with the Croatian music school context, with all modifications finalized through discussion and agreement among team members.

Additionally, participants reported the employment contract type they held (full-time permanent, full-time temporary, part-time permanent, part-time temporary). Because of the small number of respondents in some groups, this variable was dichotomized into part-time and/or temporary contract versus full-time permanent contract.

Finally, participants provided information on their gender and age.

3.3. Data analysis

Preliminary analyses indicated no signs of multicollinearity among the variables, as all their variance inflation factor (VIF) values were below two. Harman's single factor test suggested no common method bias, as one factor explained 33.39% of the variance, below the 40% threshold (Zhou & Long, 2004).

To account for the hierarchical structure of the sample (i.e., teachers nested within schools), I calculated the intraclass correlation coefficient (ICC). An ICC of .003 and a design effect of 1.015—well below the threshold of two—suggested that variance between schools accounted for only a negligible share of teachers' intention to remain in the profession. Consequently, a single-level analysis was deemed appropriate rather than a multilevel approach.

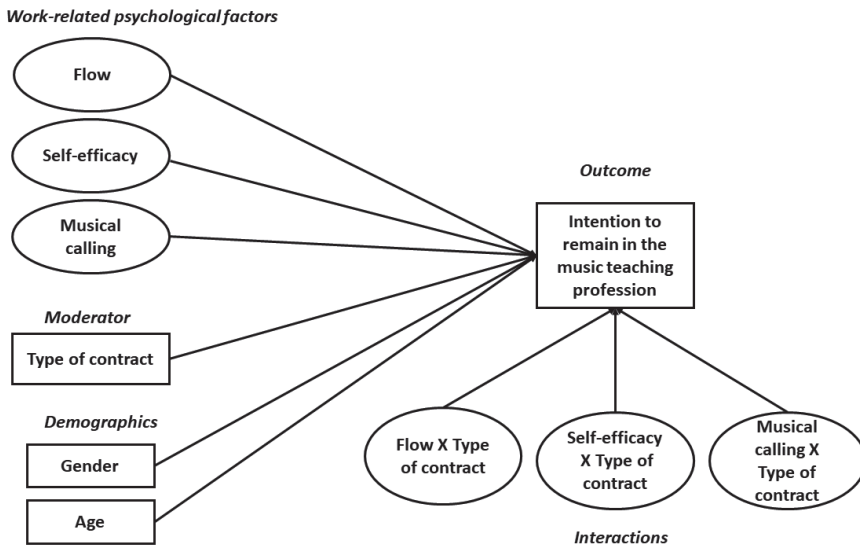
The confirmatory factor analysis (CFA) for work-related flow, self-efficacy and musical calling, modelled as three distinct but correlated factors using their respective items as indicators, demonstrated good fit ($\chi^2 = 307.177$, $df = 149$, $p = .000$; RMSEA = .060; CFI = .937; TLI = .928; SRMR = .048).

In line with JD-R theory, I initially estimated a structural equation model (SEM) specifying self-efficacy and musical calling (personal resources) as predictors, flow (as an indicator of work engagement) as a potential mediator, and intention to remain in the profession as the outcome. Flow, self-efficacy, and musical calling were modelled as latent constructs, and gender and age were included as covariates. Although the model showed satisfactory fit ($\chi^2 = 392.446$, $p < .001$, RMSEA = 0.053, CFI = 0.935, TLI = 0.925, SRMR = 0.050), flow neither predicted intention to remain nor mediated the effects of self-efficacy or musical calling, as all indirect effects were nonsignificant. This finding diverges from JD-R theory and may be attributable to the relatively high mean scores across all variables in the sample (see Table 1). In light of this, and for reasons of parsimony, together with the paper's focus on contract-related moderation effects and the relatively small sample size, flow was treated in subsequent models not as a mediator but as an exogenous variable alongside self-efficacy and musical calling.

First, a structural model was estimated with gender, age, work-related flow, self-efficacy, musical calling, and employment contract type specified as exogenous variables, and intention to remain in the music teaching profession as the endogenous outcome. Next, three additional models were tested, each including one interaction term: work-related flow $\times$ employment contract type, work-related self-efficacy $\times$ employment contract type, and musical calling $\times$ employment contract type (Figure 1). The interaction terms were examined in separate models due to the relatively small sample size, in order to reduce the risk of insufficient statistical power.

Latent variable interactions with the dichotomous moderator were estimated using the XWITH command with TYPE = RANDOM in Mplus. Because standard fit indices (e.g., RMSEA, CFI, TLI) are not provided under this specification, model comparisons between the interaction models and the baseline model without interactions were based on the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), sample-size-adjusted BIC (SABIC), as well as changes in R^2 for the dependent variable (Kline, 2016). All models were estimated using maximum likelihood with robust standard errors (MLR).

Figure 1.
Conceptual model of the study



An SEM sample size calculator (Soper, 2025) indicated that at least 209 participants were needed to detect an effect (effect size = .25, power = .80, α = .05). Most teachers ($N = 228$; 77.8%) provided complete data. Missing data were highest for age (18.4%), gender (17.1%), contract type (15.0%), and intention to remain (14.7%), with other variables $\leq 3.8\%$, yielding 96.1% complete data. To account for missing data, SEM analyses reported here were carried out using the full information maximum likelihood (FIML) method. To evaluate robustness, the analyses were also repeated using listwise deletion. The pattern of results was substantively identical across methods, supporting the stability of the findings.

4. Results

4.1. Descriptive statistics

The majority of the music teachers in the sample were female, with an average age of 41.8 years (Table 1). On average, they frequently experienced work-related flow, possessed a strong sense of self-efficacy and a high level of musical calling. Approximately three-quarters held full-time permanent contracts, while the remaining teachers had other types of employment arrangements, such as part-time, fixed-term, or a combination of both. Music teachers also showed a strong average intention to stay in the profession. The scales demonstrated strong internal consistency, as indicated by their high Cronbach's alpha values.

Table 1.
Descriptive statistics

Variable	M / %	SD	Range	Cronbach's α
<i>Demographics</i>				
Gender (%)				
Female	70.9 %			
Male	29.1 %			
Age	41.8	10.99	23-73	
<i>Work-related psychological factors</i>				
Flow	5.6	1.10	1-7	.93
Self-efficacy	4.4	0.44	2.9-5	.86
Musical calling	6.1	0.95	1.3-7	.90
<i>Moderator</i>				
Employment contract type (%)				
Part-time and/or temporary contract	22.5 %			
Full-time permanent contract	77.5 %			
<i>Outcome</i>				
Intention to remain in the music teaching profession	8.7	2.07	1-10	

All variables, except for gender, were found to be associated with music teachers' intentions to remain in the profession (Table 2). A low correlation indicated that older teachers tend to have a stronger intention to stay in the field. Additionally, moderate correlations suggested that music teachers are more likely to intend to remain in the profession when they more frequently experience work-related flow and exhibit higher levels of self-efficacy and musical calling. In addition, holding a full-time permanent contract, as opposed to a part-time and/or temporary contract, was also associated with a higher intention to remain in the profession. It is not surprising that moderate to strong positive correlations emerged among the work-related psychological factors—flow, self-efficacy, and musical calling. Female music teachers reported slightly

higher frequency of flow experiences and were, on average, somewhat older than their male colleagues, though these effects were minimal. Additionally, older teachers were more likely to hold full-time permanent contracts, which is expected, and they also tended to report more frequent experiences of flow.

Table 2.
Pearson's correlations between variables

	1	2	3	4	5	6	7
<i>Demographics</i>							
Gender (1)	-	-.133*	-.128*	-.016	-.062	-.113	-.075
Age (2)		-	.237**	.110	.048	.227**	.174**
<i>Work-related psychological factors</i>							
Flow (3)			-	.510**	.397**	.038	.328**
Self-efficacy (4)				-	.504**	.089	.433**
Musical calling (5)					-	.044	.330**
<i>Moderator</i>							
Employment contract type (6)						-	.203**
<i>Outcome</i>							
Intention to remain in the music teaching profession (7)							-

Note: Gender (0 = female, 1 = male), employment contract type (0 = part-time and/or temporary contract, 1 = full-time permanent contract); * $p < .05$, ** $p < .01$.

4.2. Structural equation models

The baseline model without interaction terms showed good overall fit (Model 1; Table 3). Among the predictors, only work-related self-efficacy and employment contract type exerted statistically significant effects on music teachers' intention to remain in the profession. Self-efficacy had a moderate impact, whereas the effect of employment type was relatively small. Although the bivariate correlations supported H1, when all work-related psychological factors were analysed simultaneously, only self-efficacy emerged as a significant predictor, while flow and musical calling were not. Thus, H1 received only partial support. By contrast, H2 was fully supported, as teachers with full-time permanent contracts reported higher intentions to remain than those with

part-time and/or temporary contracts. Overall, this model explained about 25% of the variance in the outcome.

Models 2 and 3 (Table 3) showed slightly better fit than Model 1, based on lower AIC, BIC, and SABIC values, accounting for an additional 3.7% and 3.2% of variance, respectively. Model 4 did not improve fit compared to Model 1.

Models 2 and 3 revealed statistically significant moderation effects of employment contract type on the associations between flow and self-efficacy, respectively, with music teachers' intention to remain in the profession. These moderation effects did not follow the expected pattern: associations of flow and self-efficacy with intention to remain were stronger for teachers on part-time or temporary contracts compared to those on full-time permanent contracts (Figures 2 and 3). Moreover, not including contract type moderation in Model 1 masked the effect of flow on intention to remain, as shown by the standardized betas for flow in Model 1 (without interactions, representing the full sample) compared to Model 2 (with the interaction, using part-time and/or temporary teachers as the reference category; Table 3). In other words, the effect of flow exists, but only among part-time or temporary teachers. In contrast, Model 4 indicated that the interaction between musical calling and contract type was not significant. Thus, H3 was rejected.

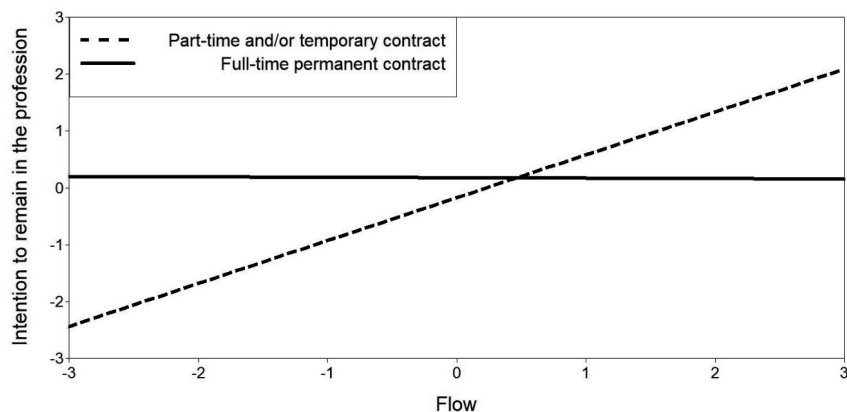
Table 3.
Structural equation models of intention to remain in the music teaching profession: standardized betas, unstandardized betas, and standard errors of hypothesized pathways

Models:	Model 1: No interaction			Model 2: Flow X Contract type			Model 3: Self-efficacy X Contract type			Model 4: Musical calling X Contract type		
	β	b	SE	β	b	SE	β	b	SE	β	b	SE
<i>Demographics</i>												
Gender	-0.030	-0.137	0.269	-0.024	-0.109	0.267	-0.032	-0.145	0.265	-0.024	-0.109	0.266
Age	0.075	0.014	0.012	0.098	0.019	0.011	0.092	0.017	0.011	0.086	0.016	0.012
<i>Work-related psychological factors</i>												
Flow	0.085	0.161	0.207	0.406*	0.771	0.332	0.086	0.163	0.192	0.088	0.165	0.207
Self-efficacy	0.328**	1.947	0.592	0.338**	2.024	0.599	0.645**	3.887	0.962	0.323**	1.917	0.594
Musical calling	0.085	0.171	0.183	0.084	0.169	0.181	0.076	0.153	0.189	0.243	0.488	0.285
<i>Moderator</i>												
Employment contract type	0.147*	0.721	0.333	0.126*	0.625	0.315	0.119	0.587	0.308	0.139*	0.684	0.334
<i>Interactions</i>												
Flow X Contract type				-0.173*	-0.786	0.330						
Self-efficacy X Contract type							-0.162**	-2.343	0.933			
Musical calling X Contract type										-0.082	-0.395	0.281
<i>Model fit indices</i>												
RMSEA	0.052											
CFI	0.940											
TLI	0.928											
SRMR	0.045											
AIC		14,426.761			14,420.667			14,421.750			14,426.769	
BIC		14,743.256			14,740.842			14,741.925			14,746.944	
SABIC		14,470.528			14,464.943			14,466.026			14,471.045	
χ^2		378.767; df=513; p=.000										
R ²		0.249			0.286			0.281			0.256	
ΔR^2					0.037			0.032			0.007	

Note: Gender (0 = female, 1 = male), employment contract type (0 = part-time and/or temporary contract, 1 = full-time permanent contract); *p < .05, **p < .01.

Figure 2.

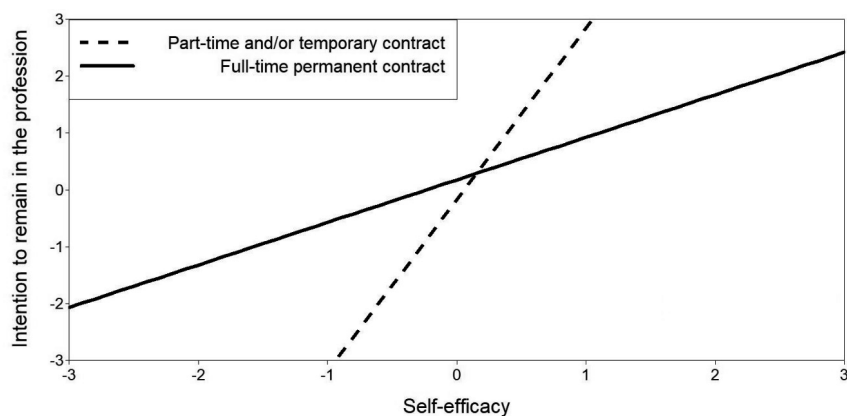
Moderating role of employment contract type in the relationship between work-related flow and intention to remain in the music teaching profession



Note: The intention to remain in the profession was expressed in standardized units, and flow was represented using standardized factor scores.

Figure 3.

Moderating role of employment contract type in the relationship between work-related self-efficacy and intention to remain in the music teaching profession



Note: The intention to remain in the profession was expressed in standardized units, and self-efficacy was represented using standardized factor scores.

5. Discussion

Although international reports highlight alarming levels of teacher attrition (UNESCO & International Task Force on Teachers for Education, 2024; Mateos-Moreno, 2025; Hash, 2021), music teachers in our sample generally expressed a strong intention to remain in the profession. Overall, the findings suggest that music teachers in this study exhibited high levels of resilience, reflected in their self-efficacy, sense of musical calling, and work-related flow. This may be explained by the Croatian context, where elementary music education is non-compulsory and typically attracts highly motivated children, while the vast majority of upper secondary students enrolled in music programs selected them as their first choice when applying to upper secondary schools (Ministry of Science, Education and Youth, 2025). These circumstances are likely to shape music teachers' attitudes toward their work and strengthen their intention to remain in the profession. Previous research has shown that low student motivation can increase teachers' desire to leave (Skaalvik & Skaalvik, 2016). The results would likely differ if the intention to remain in the profession was investigated among music teachers in compulsory elementary schools or in grammar and vocational upper secondary schools, where music-related subjects (e.g., Musical Culture and Musical Art) are mandatory components of the curriculum.

Although the bivariate correlations supported previous evidence of positive associations between teacher flow and musical identity (i.e., self-efficacy and musical calling) with intention to remain in the profession (e.g., Bochoridou et al., 2025; Shim et al., 2022; Karakus et al., 2021; Bennett & Chong, 2018; Yang & Wang, 2023), these patterns were not fully sustained in the more complex SEM analyses. Specifically, only self-efficacy emerged as a significant predictor of intention to stay. This outcome may be explained by the moderate to strong intercorrelations observed among the predictor variables in the sample of music teachers (Table 2). Although analyses revealed no evidence of multicollinearity, the predictors clearly shared variance in accounting for intention to remain. Self-efficacy has also been identified in prior studies as one of the strongest factors predicting teacher retention (Maslinsky & Ivaniushina, 2016).

As expected, employment contract type moderated the relationships between psychological factors and music teachers' intention to remain in the profession, particularly for flow and self-efficacy. However, the direction of these effects diverged from both the study's hypothesis and the predictions of Maslow's hierarchy of needs (Maslow, 1943; Hagerty, 1999), suggesting that higher-order needs—such as flow and self-efficacy—are not always fulfilled in a strict sequential order, for instance, only after satisfying safety needs like holding a full-time permanent contract (cf. Rojas et al., 2023). Moreover, these findings are inconsistent with psychological contract theory (Rousseau, 1995; Botha & Steyn, 2021). Specifically, flow and self-efficacy had a stronger impact on music teachers with part-time or temporary contracts than on their counterparts with full-time permanent contracts.

As illustrated in Figure 2, flow did not significantly affect the intention to remain among full-time permanent music teachers, but it did have an effect on part-time and/or temporary teachers. In contrast, self-efficacy was positively associated with intention to remain in both groups of music teachers, though the increase was less pronounced among those with full-time permanent contracts (Figure 3). The results suggest that self-efficacy and flow are particularly important in supporting music teachers employed under less favourable contract conditions. These results could be explained by a ceiling effect (Garin, 2014), since teachers holding full-time permanent contracts already exhibited very high intentions to stay in the profession (higher than those with less favourable contracts, as shown by the correlation coefficient in Table 2), leaving little room for additional influence. On the other hand, contract type did not moderate the relationship between musical calling and intention to stay in profession. One possible explanation for this finding is that musical calling constitutes a broader psychological construct that is less specifically connected to the teaching profession and can also be realized through other musical roles or activities, unlike music teachers' work-related flow and self-efficacy.

Research examining the moderating role of employment contract type in the relationship between psychological factors and employees' intention to remain is limited, and such studies are nearly absent in the teaching profession. Van den Tooren and de Jong (2014) reported that job insecurity exerted a stronger negative impact on both job satisfaction and overall health among permanent employees. They also found that the positive relationship between social support and job satisfaction was more pronounced for full-time permanent staff. In other words, while these findings support the hypothesis that resources interact positively with full-time permanent contracts to foster favourable work outcomes, they contrast with the results observed in the present study. However, it is important to note that Van den Tooren and de Jong (2014) analysed data from a large, heterogeneous sample spanning multiple countries, sectors, and occupations, whereas the present study focused specifically on music teachers from music schools in Croatia.

In line with international findings that a large share of early-career teachers leaves the profession within the first few years (Nguyen et al., 2019; UNESCO & International Task Force on Teachers for Education, 2024), the present study indicated that older music teachers were more likely to intend to remain in the profession. This relationship, however, was evident only at the bivariate level and was not supported in the more complex SEM analysis. Furthermore, no gender differences were observed in teachers' intention to stay, whereas earlier research suggested that female teachers were more likely to leave the profession (Nguyen et al., 2019), with more recent studies pointing to a reversal of this trend (UNESCO & International Task Force on Teachers for Education, 2024).

6. Conclusion, limitations and future research

This study highlights that music teachers in Croatia generally exhibit high resilience, reflected in strong self-efficacy, flow, and musical calling, alongside a strong intention to remain in the profession. While holding a full-time permanent contract positively predicted intention to stay, psychological factors—particularly self-efficacy and flow—had a stronger influence on teachers employed under less favourable contract conditions, such as part-time or temporary contracts. These findings suggest that personal resources play a critical role in supporting teacher retention when contractual security is limited. Practically, interventions aimed at enhancing self-efficacy and promoting work-related flow may be especially effective for music teachers in precarious employment, helping to sustain their engagement and long-term commitment to the profession.

The study employed a correlational design. Future research would benefit from testing the hypotheses using a longitudinal approach and actual attrition data rather than relying solely on teachers' intention to remain in the profession. Additionally, the outcome variable was measured with a single item, which may limit the reliability and nuance of the assessment. Future studies should therefore consider employing multi-item scales to capture the construct of intention to remain in the profession more comprehensively. Moreover, replicating the findings with a larger dataset would enhance statistical power, particularly given that the observed moderator effects were relatively small. A larger sample would also enable the investigation of the distinct effects of contract length and part-time versus full-time status, as well as the inclusion of additional indicators of job demands and resources in the model, consistent with JD-R theory.

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Otporni u prekarijatu: kako vrsta ugovora o radu moderira veze psiholoških čimbenika i namjere ostanka u profesiji nastavnika glazbe

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Sažetak

Rad ispituje moderira li vrsta ugovora o radu odnos između psiholoških čimbenika—zanesenosti poslom, samoeфикаsnosti i glazbenog poziva—te namjere nastavnika glazbe da ostanu u profesiji. Sudionici su bili 293 nastavnika glazbe (70,9 % žena) iz 55 osnovnih i srednjih glazbenih škola u Hrvatskoj. U prosjeku, nastavnici glazbe su izvještavali o čestim doživljajima zanesenosti poslom, visokoj samoeфикаsnosti, snažnom osjećaju glazbenog poziva te izraženoj namjeri ostanka u profesiji. Preliminarne korelacijske analize pokazale su pozitivne povezanosti sva tri psihološka čimbenika s namjerom ostanka; međutim, strukturalno modeliranje otkrilo je da jedino samoeфикаsnost ima značajan izravan učinak. Nadalje, posjedovanje ugovora na neodređeno vrijeme s punom satnicom, u usporedbi s posjedovanjem drugih vrsta ugovora (na određeno vrijeme i/ili s nepunom satnicom), pozitivno je predviđalo namjeru ostanka u profesiji. Značajni moderacijski učinci utvrđeni su između zanesenosti poslom i vrste ugovora, kao i između samoeфикаsnosti i vrste ugovora, koji pokazuju da su povezanosti s namjerom ostanka u profesiji izraženije među nastavnicima s ugovorima na određeno vrijeme i/ili s nepunom satnicom nego među onima s ugovorima na neodređeno vrijeme s punom satnicom. Moderacijski učinak glazbenog poziva i vrste ugovora nije potvrđen. Rezultati ukazuju da samoeфикаsnost, kao osobni resurs, i zanesenost poslom, konceptualizirana kao pokazatelj radne angažiranosti unutar okvira teorije radnih zahtjeva i resursa, imaju izraženiju ulogu olakšavajućih čimbenika kod nastavnika glazbe zaposlenih pod manje povoljnim ugovornim uvjetima. Shodno tome, naponi usmjereni na jačanje radne samoeфикаsnosti i iskustava zanesenosti vjerojatno će imati veći učinak u podržavanju namjere ostanka u profesiji među nastavnicima glazbe s ugovorima na određeno vrijeme i/ili s nepunom satnicom.

Ključne riječi: nastavnici glazbe, zanesenost poslom, samoeфикаsnost, glazbeni poziv, ugovor o radu, napuštanje nastavničke profesije, teorija radnih zahtjeva i resursa.