





Music Teachers' Work Engagement: The influence of Personal and Occupational Variables

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ENG Abstract: Teacher engagement in music education is crucial for the quality of education received by students. Despite the growing research on teacher engagement, few studies have explored the impact of job and personal resources in music education. This study examined the relationship between these three key factors: job resources, personal resources, and engagement. A total of 457 music teachers from general, higher, and special education in the Basque Country, Spain (71.1% women; M age = 44.9, SD = 10.4), were selected by convenience sampling. The results of the structural model show positive and significant relationships between job resources, personal resources, and engagement. Both types of resources explain between 14.75% and 2.86% of the variance in engagement, with job resources, such as work organization, support and recognition from others, and professional development opportunities, among others, being the most relevant predictors compared to personal resources, such as emotional intelligence, professional self-efficacy, and resilience. Our results highlight the importance of involving management teams in improving working conditions and implementing programs that strengthen teachers' emotional intelligence, self-efficacy, and resilience, preferably with active teacher participation. This approach can foster more motivated and committed teachers, enhancing the quality of educational environments.

Keywords: music teacher; engagement; emotional intelligence; teacher self-efficacy; resilience; job demands-resources theory

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1. Introduction

Music is becoming increasingly accessible to young people and forms part of their daily routines (Soares-Quadros *et al.*, 2023). This growing social and cultural presence of music is also reflected in the diversity of contexts in which music education is delivered, resulting in a broad and varied educational offering. Within the current education system, three main areas related to music education can be distinguished (Touriñán & Longueira, 2010): music education as part of general education; music education oriented towards professional and vocational development—i.e., specialist music training; and music education focused on teacher training within higher education.

However, across all these domains, music education appears to be in decline for at least three key reasons (Aróstegui, 2016, 2020). First, curricular models increasingly prioritize academic disciplines related to Science, Technology, Engineering and Mathematics (STEM subjects), to the detriment of others, including music. Second, fewer resources are allocated to these marginalized disciplines. And third, there are inadequate strategies for promoting the role of music teachers.

Additional challenges arise in specific areas. For instance, in specialist music education—such as elementary-level music schools and conservatoires—regulation and funding are fully devolved to regional governments, which represents a clear shift in public governance (Marzal, 2017). Furthermore, the legal framework for non-university higher education, established under the Spanish LOE (Organic Law of Education), has limited access for certain artistic disciplines to the university system, thereby restricting their academic and professional development (Marzal, 2017).

Against this backdrop, one of the most significant initiatives has come from the European Parliament. Its resolution (P6_TA(2009)0153, 24 March 2009) highlighted the importance of arts education as a means of ensuring equal opportunities and democratic access to culture, as well as fostering creativity and intercultural understanding. The resolution therefore calls on Member States to promote and enhance arts education. Encouraging a well-rounded artistic culture is essential for enabling students to become discerning citizens in both the consumption and expression of art, and music education plays a crucial role in this process (Bartleet *et al.*, 2019).

Clearly, the quality of music education is directly dependent on the teachers and their professional performance. In fact, work engagement is a robust predictor of job performance (Christian *et al.*, 2011). Some of the challenges reported by music teachers concern difficulties in the working environment, employment conditions, and relationships with school leadership (Kilic, 2012). This entire set of personal and job-related resources has a direct impact on teachers' work engagement—here referred to as labour engagement—which relates specifically to employees' relationships with their work (Kossyva *et al.*, 2023). The aim of this study is to examine the relationship among three groups of variables: job resources, personal resources, and the work engagement of music teachers.

2. Literature Review

2.1. Engagement

Work engagement is defined as a positive and fulfilling mental state related to work, characterised by an individual's vigour, dedication, and absorption (Schaufeli *et al.*, 2002). It thus encompasses behavioural, emotional, and cognitive components (Salanova *et al.*, 2009). A worker with high levels of work engagement will experience their job as stimulating and energising, as something they genuinely wish to devote time and effort to (the vigour component); as a meaningful endeavour (dedication); and as something fascinating and intellectually engaging (absorption) (Bakker *et al.*, 2008). Such a worker tends to sustain their commitment to the job (Bakker *et al.*, 2011), a situation that is desirable both for the individual and the organisation (Schaufeli, 2013). Indeed, research on work engagement is currently flourishing, revealing key links between engagement and professional success. In recent years, it has taken on a central role in organisational psychology literature (Bakker, 2022).

In the field of education—where teaching is a profession that carries a high level of psychosocial risk (Mérida-López *et al.*, 2020b)—teachers' engagement has been shown to be an essential contextual antecedent influencing students' academic outcome (Wang *et al.*, 2022). In this context, it is unsurprising that teacher work engagement has attracted increasing interest (Mérida-López *et al.*, 2019; Mérida-López *et al.*, 2020a, 2020b; Peralta *et al.*, 2023). However, within the broader teaching profession, music teachers face particular challenges. Research over recent decades has shown that they are especially vulnerable to burnout, which is exacerbated by factors such as limited administrative support, excessive workload, lack of recognition, scheduling conflicts, limited autonomy, classroom management challenges, and insufficient resources, among others (Hanson, 2021; Nápoles, 2022).

In the Spanish context, music teachers represent a particularly vulnerable group in terms of occupational wellbeing. One reason for this is the current model of arts education, which stems from an erratic educational policy that has perpetuated long-standing dysfunctions in this area (Marzal, 2017). Another is the existence of a wide range of training pathways and professional trajectories leading to music teaching (Duque & Jorquera-Jaramillo, 2013). Music teachers may work in a wide variety of institutional settings—such as primary and secondary schools, music schools, private music academies, conservatoires, universities, or higher education institutions specialising in music—each of which poses its own particular challenges and characteristics. As a result, music teachers face highly diverse and ever-changing professional contexts that impact their occupational wellbeing, understood as a positive evaluation of their work experience and healthy professional functioning (Granziera *et al.*, 2020).

To make matters worse, the regression in music education during the period of the LOMCE (2013–2020) put at risk the formal recognition that music education had progressively attained since the General Education Act of 1970—recognition that only became truly effective with the enactment of the LOGSE in 1990.

For all these reasons, it is crucial to investigate the role of both job-related and personal resources in music teachers' work engagement. These variables form a core part of the Job Demands–Resources (JD–R) theory.

2.2. The Job Demands–Resources (JD–R) theory

The Job Demands–Resources (JD–R) theory (Bakker & Demerouti, 2013, 2017) provides a robust theoretical framework for understanding how job demands and resources influence occupational stress and employee engagement. This theory posits reciprocal relationships between these variables, allowing for a deeper

understanding of work environments. Moreover, its flexibility and parsimony enable the integration and adaptation of a wide range of potential demands and resources (Bakker & Demerouti, 2013, 2017; Bakker, 2022).

The JD-R model classifies work characteristics into two main categories: job demands and job resources (Bakker & Demerouti, 2013). This approach is applicable across various occupational contexts, regardless of the specific demands and resources involved (Bakker & Demerouti, 2007). Its central premise is that job demands and resources can significantly influence employee engagement and well-being.

In the present study, the JD-R model serves as a key framework to explain and predict work engagement among music teachers in Spain. In this regard, it is also relevant to incorporate insights from Positive Psychology (Seligman & Csikszentmihalyi, 2000), which has fostered new ways of understanding work experiences by emphasizing strengths, motivations, and human potential (Contreras & Esguerra, 2006; Salanova *et al.*, 2016). This perspective has guided the selection of personal and occupational resources examined in this study, as these are essential for understanding the factors that enhance teacher engagement.

2.2.1. Job Resources

Job resources have been identified as key drivers of work engagement (Bakker *et al.*, 2014). They play an important role in reducing job demands and the associated physiological and psychological costs (Demerouti *et al.*, 2001), while being instrumental in achieving work goals and fostering personal growth, learning, and development (Bakker & Demerouti, 2013). Moreover, these resources have been shown to have a significant impact on motivation, particularly when job demands are high, as they can buffer the adverse effects of excessive workload (Bakker & Demerouti, 2017). It is worth noting that high levels of job resources have positive effects on employees' overall work experience (Veldhoven *et al.*, 2020).

According to Bakker and Demerouti (2017), the job resources explored in this study are as follows: (1) work organisation: optimisation and cohesion within the institution, promoting a participatory and healthy environment; (2) opportunities for professional development: professional growth and upskilling, as well as work-life balance; (3) resources provided by the institution to support teaching: availability of material and virtual tools for effective instruction; (4) perception of working conditions: autonomy, contractual security, and management of emotional and workload-related demands; and (5) support and recognition from others: backing and appreciation from families, colleagues, the wider society, educational authorities, and students.

2.2.2. Personal Resources

Personal resources are internal attributes and positive self-evaluations that enhance an individual's capacity to influence their environment, manage demands, cope with challenges, and restore emotional balance (Bakker & Demerouti, 2013). These include the ability to perceive, generate, understand, and regulate emotions (emotional intelligence), beliefs about one's efficacy in specific tasks (professional self-efficacy), and the capacity to adapt and recover in the face of adversity (resilience) (Bandura, 2006; Bakker & Demerouti, 2017; Bryan *et al.*, 2019; Mayer *et al.*, 2016).

Emotional intelligence plays a fundamental role in the teaching profession (Mérida-López *et al.*, 2019; Mérida-López *et al.*, 2020a, 2020b). In the case of music teachers, it is particularly relevant due to the necessity of managing both their own emotions and those of their students—an essential aspect of music education (Kakimova *et al.*, 2022; Rakei *et al.*, 2022).

Teachers' professional self-efficacy is crucial in the educational process, as it influences classroom quality, student adjustment, and teacher well-being (Klassen *et al.*, 2011; Tschannen-Moran & Hoy, 2001; Zee & Koomen, 2016). Although its positive impact on musical performance has been studied (Puebla & Angel-Alvarado, 2024; Zarza-Alzugaray *et al.*, 2020), its significance in music education teaching remains underexplored. The specific demands of music teaching—such as preparing performances, selecting repertoire, and managing rehearsals—suggest that professional self-efficacy is particularly important for these educators (Biasutti & Concina, 2018; Garvis & Pendergast, 2011).

Teacher resilience is essential for facing the challenges of the educational profession (Beltman *et al.*, 2011; Gu & Day, 2007; Mansfield *et al.*, 2012). In music education, resilience is even more significant due to the demanding nature of the discipline, which requires continuous adaptation and recovery in the face of difficulties (Welch *et al.*, 2010).

2.3. Context: The Basque Autonomous Community

To conduct a preliminary exploratory analysis of the work engagement model among music teachers, the population selected comprises music educators from the Basque Autonomous Community (BAC), for several key reasons. The BAC has its own education system, recognised for its quality, which allows the research to focus on a specific and well-developed educational framework. This provides a representative sample encompassing diverse professional profiles within the field of music education.

The region is characterised by a strong tradition of music education, with numerous schools and academies, many of which are members of EHME (Euskal Herriko Musika Eskolen Elkarte – Association of Music Schools of the Basque Country). In addition, each province has at least two conservatoires, enabling access to formal, regulated music education, and the Basque Country also hosts a higher education institution dedicated to music (Musikene). In general education settings, music is taught by specialist music teachers, and several universities in the region offer specific programmes or specialisations in music education training.

This educational landscape—supported by public institutions and a robust musical tradition—offers an optimal setting for gathering relevant data on music teachers' work engagement. The selection of the BAC allows for a comprehensive exploration of these professionals, ensuring a deep and contextually grounded understanding of their occupational engagement.

2.4. Research Aim and Question

The aim of this study is to examine the relationship between job resources, personal resources, and work engagement among music teachers in the Basque Autonomous Community (BAC). Accordingly, the research question guiding this study is: How are job and personal resources related to the work engagement of music teachers in the Basque Autonomous Community (BAC)?

The first general hypothesis posits that work engagement is positively influenced by both job and personal resources. Specifically, it is expected that engagement scores will be positively correlated with job resources (Hypothesis 1A), emotional intelligence (Hypothesis 1B), professional self-efficacy (Hypothesis 1C), and resilience (Hypothesis 1D).

The second general hypothesis anticipates that the independent variables will also be positively correlated with one another. In particular, positive correlations are expected between job resources and emotional intelligence (Hypothesis 2A), professional self-efficacy (Hypothesis 2B), and resilience (Hypothesis 2C). Likewise, positive correlations are expected between emotional intelligence and professional self-efficacy (Hypothesis 2D), emotional intelligence and resilience (Hypothesis 2E), and between professional self-efficacy and resilience (Hypothesis 2F).

3. Method

3.1. Participants

A convenience sample of 457 voluntary participants, all active music teachers from the Basque Autonomous Community, was used in this study. However, the number of valid participants was 443. Participants could be employed in general education (primary and secondary), higher education (university and advanced music studies), or specialised education (academies, music schools, and conservatoires). Participants' ages ranged from 21 to 73 years ($M = 44.9$, $SD = 10.4$). Of the total sample, 314 (70.9%) identified as women, 126 (28.4%) as men, and 3 (0.7%) as non-binary. Teaching experience in music ranged from 0 to 52 years ($M = 18.1$ years, $SD = 11.2$), and was statistically associated with age ($r = .85$, $p < .001$). No significant gender differences were found in either age, $F(2, 454) = 0.389$, $p = .678$, or years of teaching experience, $F(2, 454) = 0.052$, $p = .949$.

3.2. Instruments

Utrecht Work Engagement Scale (UWES-17), Spanish adaptation (Salanova & Schaufeli, 2004). This 17-item self-report scale measures psychological engagement with work. The internal consistency of the full Engagement questionnaire was $\alpha = .928$, 95% CI [.915, .940], and its split-half reliability was $R_{xx} = .93$. While Salanova and Schaufeli (2004) identified three dimensions—vigour, dedication, and absorption—an exploratory factor analysis (EFA) conducted on our sample of music teachers suggested a two-factor engagement model: positive aspects ($R_{xx} = .94$), and tenacity and perseverance ($R_{xx} = .86$).

Perceived Job Resources Scale. This *ad hoc* scale was developed based on the Job Demands–Resources theory (Bakker & Demerouti, 2013, 2017) and adapted to the specific characteristics of music teachers' professional environments. The internal consistency of the scale was $\alpha = .859$, 95% CI [.798, .899], and its reliability $R_{xx} = .92$. The scale comprises thirty-six items across five dimensions: (1) work organisation, $R_{xx} = .96$; (2) opportunities for professional development, $R_{xx} = .86$; (3) resources provided by the institution, $R_{xx} = .74$; (4) perception of working conditions, $R_{xx} = .83$; and (5) support and recognition from others, $R_{xx} = .84$.

Wong and Law's Emotional Intelligence Scale - Spanish versión (WLEIS-S) (Extremera *et al.*, 2019). This 16-item self-report scale assesses emotional intelligence (EI). While Extremera *et al.* (2019) found four factors, an EFA conducted with our sample of music teachers identified three: intrapersonal EI ($R_{xx} = .87$), interpersonal EI ($R_{xx} = .84$), and emotional assimilation/regulation ($R_{xx} = .86$). The internal consistency of the full Emotional Intelligence instrument was $\alpha = .902$, 95% CI [.880, .917], and its reliability $R_{xx} = .90$.

Teachers' Professional Self-Efficacy Scale. This *ad hoc* scale was developed following Bandura's (2006) guidelines to assess music teachers' self-efficacy in relation to their professional competencies. Its internal consistency was $\alpha = .875$, 95% CI [.853, .893], and reliability $R_{xx} = .89$. The scale includes 14 items across two dimensions: (1) transversal competencies ($R_{xx} = .85$), encompassing skills common to all teaching staff; and (2) musical competencies ($R_{xx} = .82$), specific to the subject.

Brief Resilient Coping Scale - Spanish adaptation (Limonero *et al.*, 2014). This is the Spanish version of the Brief Resilient Coping Scale (BRCS) by Sinclair and Wallston (2004). It is a self-report scale measuring the capacity for resilient coping, i.e., the ability to adapt positively to adverse situations. The version used in this study included three of the original four items, yielding an internal consistency of $\alpha = .822$, 95% CI [.775, .846], and reliability $R_{xx} = .99$, demonstrating adequate consistency within this sample. The item "Regardless of what happens to me, I believe I can control my reaction" was excluded due to conceptual overlap with the emotional regulation dimension of the emotional intelligence scale. Given that the BRCS has been validated

as a unidimensional scale, this modification was not considered to compromise its factorial structure. The theoretical validity of this decision was supported by the reliability indices obtained in this sample.

Regarding the set of instruments used in this study, both reliability (using split-half technique and Cronbach's alpha) and factorial validity (via Exploratory Factor Analysis, EFA) were examined. This was done for both the *ad hoc* instruments developed specifically for this study and for those previously validated in Spanish, as they were being used to draw conclusions from a specific and qualitatively distinct population. The suitability of the instruments for EFA was assessed using Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. Given the absence of multivariate normality, factor extraction was performed using the Minimum Residual Factor Analysis method (minres), and, where necessary, an oblique Promax rotation was applied. The number of resulting factors was interpreted based on the EFA results, while the naming of these factors was informed by both item wording and relevant theoretical frameworks.

3.3. Procedure

Data collection was conducted cross-sectionally through a survey, using stratified convenience sampling based on three educational levels: general education, specialised education, and higher education. Using information from the Basque Government's official directory, an email was sent to the heads of educational institutions requesting that they distribute it to music teachers at their respective centres. At the same time, the Basque Association of Music Schools (Euskal Herriko Musika Eskolen Elkarte - EHME) was contacted via email. Snowball sampling was also employed through personal contacts. Participants could complete the questionnaires either in printed paper format or online. The study received approval from the Ethics Committee of the University of Deusto (Ref: ETK-17/19-20).

3.4. Data Analysis

The fit of the theoretical model proposed in the introductory section (Figure 1) was tested against the empirical data using a Structural Equation Model (SEM). Due to the absence of multivariate normality, a robust estimation method was applied: diagonally weighted least squares (DWLS). Once the model was established, several fit indices were used to assess its adequacy to the data (Hu & Bentler, 1999; Schreiber *et al.*, 2006): the χ^2 statistic and its ratio to degrees of freedom (χ^2/df); the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI); and the Standardised Root Mean Square Residual (SRMR). Standardised parameter estimates were also interpreted based on their direction and magnitude. A significance level of $\alpha = .05$ was used for all analyses. Statistical analyses were conducted using SPSS 25 and R (with the lavaan, MVN, MBESS, and psych packages).

4. Results

The proposed theoretical model showed an adequate fit to the data, exceeding the recommended thresholds for the selected indices (except for χ^2 , as is common in large samples and complex models), as detailed in Table 1

Tabla 1 Fit Indices form the SEM Model.

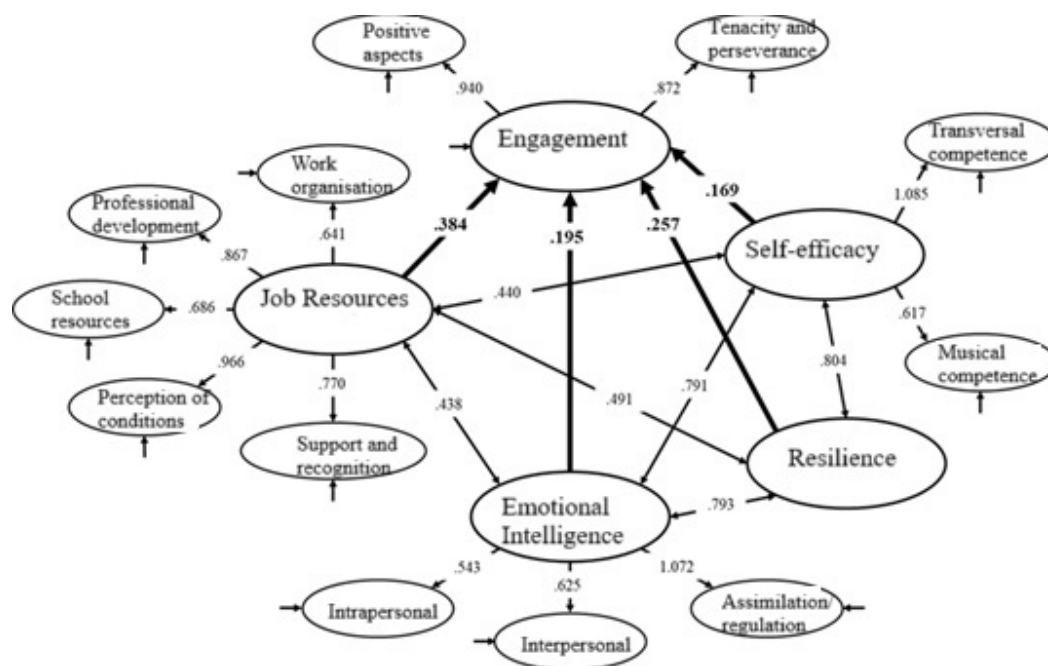
Fit Index	Model	RV
χ^2	7505.91*	-
gl	3547	-
χ^2/gl	2.12	≤ 3.000
RMSEA	0.050	< .060 to .080
RMSEA [90% CI]	[.049, .052]	< .060 to .080
SRMR	.080	$\leq .080$
CFI	.956	$\geq .950$
TLI	.955	$\geq .950$

Notas. N = 443. Estimation method: DWLS. RV: Recommended Values (Hu & Bentler, 1999; Schreiber *et al.*, 2006). *p < .001

Figure 1 displays the structural model and the estimated parameters. For space considerations, the measurement models (i.e., the relationship between each latent variable or construct and its observed indicators—the items of each instrument) are not shown. These measurement models are available upon request from the corresponding author.

All estimated parameters are statistically significant. The standardised regression coefficients of work engagement on the independent variables range from .169 to .384, indicating a shared variance with work engagement between 2.86% and 14.75%. The regression coefficients for transversal competence and emotional assimilation/regulation exceed 1 and therefore are not directly interpretable. This artefact can occur in complex models due to multicollinearity among variables. Deegan (1978) argued that the presence of such coefficients does not distort the magnitude of the remaining ones, and advised against their removal, as doing so may lead to model misspecification and related interpretative issues.

(fig.1) Structural Model. Engagement as a Function of Job Resources and Personal Resources (Emotional Intelligence, Self-Efficacy Belief, and Resilience)



Note. N = 443. Correlations and standardised regression coefficients are shown. All parameters are significant, $ps < .001$. The residual variance of the endogenous variables is represented by single-headed arrows without an origin. The measurement models of the latent constructs are not depicted in this figure.

5. Discussion

The aim of this study was to investigate the relationship between job resources, personal resources, and work engagement among music teachers, considering the latter as the outcome variable. A convenience sample of music teachers from the Basque Autonomous Community was used, and the study was based on the theoretical framework of the Job Demands–Resources (JD–R) model. According to this model, teachers' work engagement depends on both job and personal resources; hence, our analysis included both types.

The model (Figure 1) showed a good fit with the survey data. As expected, the independent variables explained varying degrees of the variance in work engagement, ranging from 14.75% to 2.86%, with all relationships being positive (hypotheses 1A to 1D). Additionally, all independent variables were positively and significantly correlated with one another (hypotheses 2A to 2F). These results are consistent with the JD–R theory (Bakker & Demerouti, 2013, 2017; Bakker, 2022). According to our findings, both job and personal resources are predictors of teacher engagement in the context of music education. This aligns with previous research highlighting job and personal resources as key elements for work engagement (Bermejo-Toro *et al.*, 2016).

A more in-depth interpretation of the results follows, considering the variance explained by each predictor variable, from greatest to least influence. First, job resources accounted for the highest proportion of variance in work engagement (14.75%), in line with earlier studies conducted within the JD–R framework (Bakker *et al.*, 2011; Cornejo & Quiñónez, 2007; Moreno, 2011; Vera *et al.*, 2012). This flexible and context-adaptable model (Bakker & Demerouti, 2013, 2017) highlights the importance of factors such as work organisation, professional development opportunities, institutional resources, perceptions of working conditions, and external support or recognition. In our study, these elements outweighed the influence of personal resources, suggesting that strengthening institutional support could be key to enhancing teacher engagement. Thus, developing strategies that optimise the working environment would not only benefit teachers' performance and well-being but could also improve the overall quality of music education.

Second, resilience showed a significant medium-sized relationship with music teachers' work engagement. This personal resource is crucial for managing the demands inherent to teaching and directly affects levels of burnout and the ability to sustain a positive work state (Bermejo-Toro *et al.*, 2016; Granziera *et al.*, 2020; Parker *et al.*, 2012). Within the JD–R framework, resilience emerged as the most influential personal factor, accounting for 6.6% of the variance. This may be attributable to the specific demands of the music education context. These findings underscore the importance of equipping teachers with strategies and training programmes that strengthen resilience, thereby improving their ability to manage daily challenges and promoting occupational well-being (Kan & Yoo, 2019).

Third, emotional intelligence proved to be a relevant personal resource for enhancing teacher well-being and performance (Vesely *et al.*, 2013), as supported by numerous studies in educational contexts (Álvarez-Ramírez *et al.*, 2017; Extremera *et al.*, 2019; Rojas, 2007). Although its relationship with music teachers' engagement in our study was significant, it accounted for a smaller proportion of the variance (3.8%). Nevertheless, its contribution remains positive. Therefore, incorporating emotional intelligence training into teacher education may enhance the ability to perceive, use, understand, and regulate emotions (Bisquerra & García, 2018), which is particularly relevant in music education, where both teachers' and students' emotional regulation is crucial (Kakimova *et al.*, 2022; Rakei *et al.*, 2022). Furthermore, recent research suggests that such training not only fosters teacher well-being and emotional competence but also improves the quality of music education and promotes a more positive learning environment (Concina, 2023).

Finally, teaching self-efficacy was considered. Based on existing literature (Salanova *et al.*, 2005; Salanova & Schaufeli, 2004; Ventura *et al.*, 2006, 2014), professional self-efficacy was selected as a predictor variable for work engagement. Research suggests that high professional self-efficacy helps interpret work demands as challenges, thereby promoting a more stimulating and energetic work experience (Ventura *et al.*, 2006). However, in our study, self-efficacy showed the least influence on music teachers' engagement, explaining only 2.86% of the variance. Despite its limited impact, it remains a factor worth considering, as it could be strengthened through training programmes designed to enhance personal efficacy beliefs in specific contexts such as music education. Future research might examine its moderating role between emotional intelligence and engagement (Mérida-López *et al.*, 2020a), as well as explore the conditions under which self-efficacy exerts greater influence (e.g., varying levels of teaching experience or degrees of musical specialisation).

In conclusion, the model's good fit and the direction and magnitude of the observed relationships between variables provide empirical support for the proposed model. The sample was sufficiently large and diverse in terms of age, gender, and work experience, providing a solid basis for our conclusions. Nonetheless, several limitations of this study must be considered.

5.1. On the Measurement of Job Resources

It is important to reflect on the grouping of job resources into a single variable, a factor that may have influenced their prominent position. Job resources were operationalized through a single questionnaire that encompasses various dimensions, whereas personal resources were measured using three different instruments. Altogether, these three instruments explained 13.2% of the variance in work engagement—a very similar effect size to that obtained with the job resources questionnaire. Personal resources could have been operationalized as the score from a single instrument; for example, the Psychological Capital questionnaire (PsyCap; Luthans & Youssef, 2004; Luthans *et al.*, 2007) includes different personal resources (self-efficacy, hope, optimism, and resilience). However, the model also aimed to include a theoretically relevant construct such as emotional intelligence. As observed, this construct also appears to play a role in work engagement. It should also be noted that each construct has followed its own development path and has its own specific measurement instruments. All of this suggests the need to explore the grouping of personal resources in future research.

5.2. Limitations and Suggestions for Improvement

Four limitations of this study are outlined below. First, the study is descriptive and cross-sectional in nature. Consequently, the structural model uses the correlation matrix among variables. Therefore, no causal conclusions can be drawn from the results due to the type of study, data collection, and analysis. Causal relationships have been proposed in light of theory and previous studies, but alternative models cannot be ruled out. Nevertheless, it is difficult to design experimental studies in ecological contexts when something as significant as work engagement is at stake.

Second, the external validity of the study is limited by the sampling method. As a convenience sample was used, it is difficult to generalize the results to the entire population of music teachers, even to a specific population such as that of the Basque Autonomous Community (BAC). However, the sample size is considerable, and an effort was made to gather data from all types of teachers based on various variables.

Third, the data analyzed are self-reported and thus may be affected by social desirability or other voluntary or involuntary biases. On the other hand, it is important to highlight that the psychosocial reality of work engagement does not only refer to the objective conditions of the job, but also to the conditions perceived and experienced by the teacher (Pérez & Nogareda, 2012). Therefore, collecting self-reported data is a meaningful approach.

Finally, fourth, while integrating music teachers into a single study helps to give visibility to a professional profile that has historically been relegated to a secondary position within the education system, this decision also entails a limitation. From a global and integrative perspective, the group has been considered a professional collective that shares a permeable and complementary identity, subject to working conditions and obligations with many common elements. Nevertheless, the professional realities of music teachers may differ significantly depending on the educational setting in which they work (e.g., in terms of job stability, contractual conditions, or institutional recognition), which could have influenced their perception of work engagement. In future studies, it would be advisable to control for this variable to assess the possible impact of the teaching setting on the results.

Future research could also explore comparisons of teacher engagement based on the educational level in which instruction is delivered, in order to identify potential differences linked to the specific conditions

and characteristics of each context. Moreover, future studies could benefit from a longitudinal design to observe changes over time, especially if regulatory changes affecting teachers' job resources occur between measurements. Additionally, the findings presented here could be complemented with data obtained through other measurement methods such as interviews, follow-up journals, or performance assessments. Likewise, a random selection from a census of music teachers in the BAC would improve the generalizability of the results; however, the diversity of teacher profiles outlined in the introduction makes this sampling method very difficult to implement.

5.3. Workplace and Educational Implications

The results obtained in this study can serve as a foundation for developing practical strategies aimed at increasing the work engagement of music teachers. One fruitful approach would be to design and implement initiatives targeting both the teaching staff and educational institutions.

In this regard, school leadership teams should pay close attention to the job resources they offer teachers, by fostering school optimization and cohesion, promoting a participatory and healthy environment, providing opportunities for professional growth and development, facilitating access to resources for effective teaching, and improving autonomy and the management of work intensity, among other factors. In addition, it is essential to design programs aimed at enhancing the personal resources of music teachers. Similarly, it is important to raise teachers' awareness of the importance of cultivating their personal resources, which will positively impact their work engagement.

These efforts can contribute to a more motivated and committed teaching staff, thereby fostering higher quality educational environments. However, it is essential that these programs and strategies—including the training of music teachers—are adequately supported with resources by school management and public administration.

It is important to emphasize that integrating music teachers into a single study helps to shed light on a teaching profile that has traditionally been relegated to a secondary role within the education system. From this perspective, the results not only allow for the identification of avenues for improvement in the management of personal and job resources, but also offer strong arguments for reinforcing the institutional, educational, and symbolic recognition of music education. In this sense, the study aims to contribute elements that promote broader reflection on the place this discipline occupies within the education system.

6. Conclusion

This study demonstrates that both job and personal resources positively influence the work engagement of music teachers in the Basque Autonomous Community (CAPV), thereby expanding the empirical evidence in a context with no prior research. Furthermore, the relationship between job resources and personal resources suggests a combined effect—both direct and indirect—on teacher engagement. These findings not only reinforce the need to design educational and training policies that strengthen these dimensions but also highlight the opportunity to transform the teaching experience into one that is more stimulating, resilient, and ultimately conducive to improving educational quality. In short, this research sets a clear path for developing school environments that nurture teachers' potential and raise the standards of music education in the region.

7. References

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