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Developing a Sustainable Work Environment for Substitute Teachers: A Multi-Criteria Job Satisfaction Approach

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Abstract: Retention of provisional substitute teachers (PSTs) in the teaching profession is an important and timely topic that relates to the sustainability of the schools' work environment and teaching profession. The present study re-examines these issues using teacher job satisfaction (TJS) as a surrogate variable. More precisely, MUlti-criteria Satisfaction Analysis (MUSA) -a method that combines Multi-Criteria Decision and Importance-Performance Analysis- is applied to a data set of primary school substitute teachers from Greece to assess the contribution of schools' performance on 5 important aspects of the school environment i.e., opportunities for self-fulfillment, work intensity/load, salary/income, leadership and collegial relations, to overall PSTs JS. The findings indicate that self-fulfillment and collegial relationships contribute the most to PST overall JS, whilst salary/income the least. The results further suggest that self-fulfillment is not only the facet of the work environment that PSTs value the most but also the strong point of the schools' work environment. The study provides a new strategic perspective on TJS research, as well as evidence-based strategies for improving the quality of work life and attrition rate levels of substitute teachers. Moreover, the theoretical and practical implications of this study are presented and avenues for future research are highlighted.

Keywords: substitute teachers; sustainable work; teacher job satisfaction; MCDA; MUSA; IPA

Citation: Glaveli, N.; Manolitzas, P.; Vouzas, F.; Liassidis, C. Developing a Sustainable Work Environment for Substitute Teachers: A Multi-Criteria Job Satisfaction Approach. *Sustainability* **2023**, *15*, 1154. https://doi.org/10.3390/su15021154

Academic Editor: Antonio P. Gutierrez de Blume

Received: 22 November 2022
Revised: 24 December 2022
Accepted: 4 January 2023
Published: 7 January 2023

1. Introduction

By employment status, teachers in primary public schools can be primary permanent fulltime teachers (PPTs) or provisional substitute teachers (PSTs) who serve teaching needs that arise from either retirement or resignation or short and long-term leaves related to: childbirth, pregnancy, maternity, sickness, professional development, personal issues, etc [1]. Since the absences of full-time teachers are unavoidable, PSTs represent on average 20% of the teachers' population in the European Union (EU) [1] and they are therefore highly important for the quality, effectiveness, and continuation of the education system. Nonetheless, inequalities in working conditions between these two groups are apparent [2]. More precisely, PSTs work on a fixed-term contract (in Greece as in most EU countries, they have to be registered as unemployed at the end of the school year and it is uncertain whether their contract will be renewed), have lower qualifications, and developmental prospects, they are underpaid and change schools regularly, hence they do not have the opportunity to develop long-term social bonds with students, colleagues and parents [3]. The previous factors have been underlined as key workplace variables that affect teacher job satisfaction (TJS) and therefore are crucial for teachers' decision to enter and stay in the profession [4–6]. As such, it can be supported that they can also relate to the sustainability of PSTs' teaching work and profession. Sustainable work means achieving living and working conditions that support people in engaging and remaining in

work throughout an extended working life [7]. Therefore, a sustainable school work environment for PSTs is the environment that keeps them satisfied and eliminates the factors that discourage or hinder them from staying in or entering the workforce (sustainability of labor supply) [7]. The latest is of utmost importance, particularly if one considers the reported shortages and the higher drop offs of PSTs (related to PPTs) from the teaching profession [2].

TJS is, indeed, an important variable resulting in many essential and far-reaching implications for schools and various stakeholders in the school environment. More precisely, at the school level TJS has been associated with the Total Quality Management (TQM) effort [8] and with more effective school management and enhanced school cohesion [9]. Also, happier teachers are more active and committed [10], less stressed [11], reach higher performance levels [5] and present lower turnover and absenteeism rates [12]. On top of that, the students of satisfied teachers indicate higher levels of self-esteem and commitment and therefore higher performance and achievement levels [13]. Finally, TJS has been found to improve the status of the teaching profession and the teaching attrition levels [14] and to be strongly associated with the quality of life in a society [15]. Based on the previous discussion, it could be supported that gaining a profound understanding of the school work environment factors that contribute to (substitute) TJS can help decision-makers in education to increase the quality, effectiveness, and sustainability of the (substitute) teaching profession with multiplier effects for all stakeholders in the school environment.

Nonetheless, although PSTs represent a high percentage of the primary school teachers population that needs to be equally satisfied from its work and engaged to effectively support the school unit and its students' learning experience [16,17]; yet, they are a rather "forgotten" [18] and "undervalued" segment. Undeniably, there is insufficient empirical evidence on the delineation of their JS patterns and less effort is devoted to intervention targeting to improve their working conditions. Therefore, research on PSTs JS is an important and timely issue. Also, a major drawback of this limited research relates to its level of abstraction, as well as to the lack of identification of empirically based relationships that provide direct action implications that school leaders and government officials can implement to improve the quality of the work environment for PPTs and enhance their JS levels [4,19]. The latest ascertainment is further supported by the fact that research on JS in education has largely ignored that boosting (substitute) TJS depends on an in-depth understanding of two aspects: the perceived importance of individual work environment facets for substitute teachers and their perceptions on organization's performance (i.e., the level of specific facet JS) in providing a high-quality work environment [19,20]. The latest raises understanding of what is important to change in the immediate future.

The present work aims to extend the limited research on substitute teachers JS by addressing the previously identified deficiencies. The application of MUlti-criteria Satisfaction Analysis (MUSA) [20–23] method for data analysis provides this opportunity. MUSA combines Multi-Criteria Decision Analysis (MCDA) and Importance Performance Analysis (IPA). Therefore, overall PSTs JS is approached as a "business problem" (i.e., how to improve PSTs overall JS) to be solved assuming that its optimal solution involves multiple criteria representing (in the present study) work environment aspects/dimensions. Specifically, in our study five aspects of PSTs JS (well recognized in the relevant literature as JS facets related to the school work environment) were adopted as satisfaction criteria namely: opportunities provided for self-fulfillment, work intensity/load, salary/income, leadership relations and collegial relations [4–6,10]. Moreover, IPA helps in suggesting the strong and weak points of PSTs JS and therefore underlines the critical aspects/facets of the school work environment that call for immediate action.

Concluding, the aim of the present work is to extend research on PSTs JS in three ways: First, to underline the aspects of the work environment that PSTs value the most (i.e., contribute the most to their overall JS). Second, to delineate the weak and strong point of PSTs JS by considering both PSTs' job values and schools' performance in providing a

satisfying work environment. Third, to suggest evidence-based directions for boosting PSTs overall JS.

2. Literature Review

2.1. Teacher Job Satisfaction: Definition, Approaches and Measurement

It is not easy to provide a widely accepted definition of JS. Indeed, the theoretical tenants of JS are rather broad since they include facets intrinsic to the type of the job itself as well as to the working environment [24]. However, it could be stated that JS generally refers to how people feel about their job and its specific aspects. Nevertheless, the evaluation of JS entails a cognitive process as well [25]. Thus, TJS "refers to a teacher's affective relation to his/her teaching role and is a function of the perceived relationship between what one wants from teaching and what one perceives it is offering to a teacher" [26], p. 359.

TJS (as in general JS) has been approached under two different perspectives; the global and the faceted ones [27]. The first attempts to answer general questions of TJS, whilst the second examines facets of TJS such as: physical environment, relations with colleagues and the school principal, workload/work intensity pay/rewards, nature of work, opportunities for self-fulfillment, development and advancement, recognition, and well-being [4–6,10]. Although both approaches can be considered as reasonable, and have been equally adopted in the JS and TJS literature, the global approach may be more appropriate when making time sensitive decisions, whilst the faceted perspective gives an organization the opportunity to examine and understand how different facets influence one's attitudes and feelings towards work and thus, make specific changes to improve it [4,27,28].

Accordingly, TJS has been operationalized under both perspectives. Also, various measurement scales have been developed for measuring JS specifically in the school context or adopted from the wide JS literature (e.g., Job Descriptive Index/JDI proposed by Smith [29]; Minnesota Satisfaction Questionnaire/MSQ developed by Weiss [28,30] and Employee Satisfaction Inventory/ESI suggested by Koustelios and Bagiatis [31]) to serve both approaches e.g., [5,32–38].

2.2. TJS: Importance of Job Facets and School's Performance

It is evident that research on JS in education has largely ignored the relationship between importance of individual job facets and overall job satisfaction [4,19], failing thus to embrace the idea that " .. only when an individual feels that a job facet is important . . . will extreme levels of satisfaction or dissatisfaction be experienced. In contrast, when a job facet is perceived to be unimportant, less extreme levels of satisfaction or dissatisfaction will be experienced" [39], p. 46. Moreover the relevant research has not considered the fact that decision makers in education cannot make decisions for improving (substitute) teachers' overall JS levels relying only upon knowledge of the importance (weights) of critical aspects of the work environment for overall TJS (knowledge of what is important for them). It is also crucial to take into consideration their perceptions of the school's performance regarding these attributes (knowledge of what is important to change right now) [40].

2.3. Studies on Substitute Teachers Job Satisfaction

Only a handful of studies have approached PSTs JS. For example, Gonzales [41], studied substitute TJS using data from 187 respondents in the USA. The author used descriptive methods (percentages) and correlations and found that substitute teachers are more likely to stay in substitute teaching because of opportunities to work with students, delimited job responsibilities and their perception that the job of substitute teacher is valuable. However, lack of benefits, job-related support, job-related stress, and inappropriate student behavior make substitute teachers more likely to leave teaching.

Skaff-Schumaker [42] in her doctoral thesis conducted a qualitative, multiple-case study to explore JS among substitute teachers in K-12 public schools in the USA. Based on a sample of 53 substitute teachers the author suggests that relationships, particularly

respect and appreciation from the student and appreciation from other faculty members and parents, was the primary contributor to PSTs overall JS. Moreover, being effective in dealing with behavior problems of students and watching students learn were also considered to be important. Furthermore, participants recommended that the most important action that school districts can take in achieving PSTs JS, would be to provide stable, long-term venues of employment.

Finally, Topchyan and Woehler [18] directly compare full-time and substitute teachers' JS. They used the five-item Teacher Satisfaction Scale (TSS) developed by Ho and Au [35] and collected data from 238 full-time and substitute teachers. The findings, based on MANOVA analysis, illustrated that full-time teachers' JS was significantly higher than substitute teachers' JS, nevertheless no further analysis was conducted.

2.4. Research Questions

From the above discussion it is apparent that PSTs JS, although important, is an unexplored field both in terms of number of studies, as well as regarding the understanding of the factors that are important and contribute the most to overall PSTs JS. Also, suggestions for action have not been framed on a collective understanding of substitute teachers' work values (what is important for them) and their perceptions on the schools' performance in satisfying them (level of facet and overall JS), missing thus an important opportunity for more effective interventions. These limitations are closely related to the type of analyses utilized (i.e., correlations, MANOVA). Therefore, in the present study the MUSA method is applied on the collected data (please advice Section 3.4) to help us approach substitute TJS under a different perspective. MUSA, is an MCDA method which produces outputs that are extracted in a simple and easily understood (visual) way -such as: satisfaction criteria weight pies (underlying the work values of the understudy subjects i.e., what is important for overall JS), as well as importance-performance (SWOT type) diagrams (suggesting what is important to change right now). Consequently, the current work provides a more in-depth analysis of substitutes' TJS that is useful for effective decision making in providing a sustainable work environment for substitute teachers.

More precisely, we extend the theory and practice of (sustainable) people management in the school context by providing answers to the following research questions (RQs):

- RQ1: Which aspects (i.e., opportunities for self-fulfillment, work intensity/load, salary/income, leadership, and collegial relations) of the work environment are important for PSTs overall JS?
- RQ2: What are the strong and weak points of PSTs JS, considering PSTs' job values as well as their schools' performance in providing a satisfying work environment?
- RQ3: How could school principals and policy-makers improve PSTs JS based on evidence-based knowledge?

3. Methodology

3.1. The Study Context

The Greek educational context provided the frame for our research. The (public) education system in Greece is extremely state controlled and centralized. Therefore, only a few initiatives are left on the school unit. This is particularly true when it comes to human resource management (HRM) decisions. For example, wages/benefits are state determined, pay rises depend on employment status and working years, whilst promotions are centrally decided based on qualifications and work experience [3]. Moreover, schools have restricted responsibility and accountability for students' learning [3]. It is relevant to underline that the school work environment in Greece has deteriorated due to the deep economic crisis that the country has been facing over the past 15 years. Teachers saw a mass reduction in their salaries (around 25%) and changes in their job descriptions [43]. Moreover, teaching hours were extended to 23 per week [44]. Also, during the COVID-19 period they had to adjust rapidly to the challenges of online teaching and teleworking. These factors are burdens for achieving high levels of TJS.

By employment status, teachers in public schools can be permanent full-time teachers or provisional substitute teachers. Substitutes represent around 26% of the total population of public (primary and secondary) school teachers. Permanent teachers occupy organic positions, whilst substitutes work with yearly contracts (not necessarily renewable) and are centrally appointed to schools to address current teaching needs mainly in the periphery of the country [43]. Based on retirements and central planning decisions a percentage of the PSTs may change status to a permanent one after a few years of employment [43,44].

3.2. Sampling and Data Collection Procedure

The primary public schools were selected in accordance with the sampling procedures typically recommended by the Greek Department of Public Education (stratified random sampling). In total, the principals of 2735 primary schools (out of the 4272 operating in Greece in September 2020) from urban, semi-urban and rural areas (which represent 64% of the total population) were contacted by email in October 2020 and the school principals were asked to forward the questionnaire to their PSTs. In total, 189 valid questionnaires were received.

The online questionnaire consisted of two sections. The first section included questions designed to determine teachers' personal characteristics namely: gender, age, education level, total years of service and years of service with the specific school, specialization, and type of employment. The second section incorporated 27 questions. Twenty-six (26) measured facet JS, whilst one (1) item evaluated overall PSTs JS. Also, a cover letter explaining the aim of the research and assuring confidentiality and anonymity was attached to the questionnaire.

The majority of PSTs in the sample were women (85.3%), in their middle adulthood (83.7% were under 40). Also, 60.5% hold a master degree and on average they had a working experience of 7.2 years.

3.3. Measurement of Facet Satisfaction and Overall TJS

The instrument developed by Bolin [33] was adopted for measuring PSTs JS with specific aspects of the school environment. The scale includes 26 items that fall into five sources of TJS: opportunities provided for self-fulfillment (incorporates 7 items that relate to sense of achievement, fulfillment of ideal, use of abilities/full potential, respect from students and parents, social value of job), work intensity/load (includes 5 items that relate to stress and hygiene), salary/income (includes 5 items that pertain to income and welfare), leadership relations and collegial relations (these two factors consist of 9 items that concern relationships with the school leader and colleagues). These elements -as underlined earlier- have been identified by extant research as the aspects of work environment that matter for teachers and relate to the current developments that characterize the teaching landscape. Also, 1 item referring to overall JS was added. Respondents were asked to evaluate their working environment aspects and overall job satisfaction using a 5-point Likert-type scale -ranging from 1 = strongly disagree to 5 = strongly agree.

3.4. Validity and Reliability

The psychometric properties of the TJS construct were initially assessed by applying first-order confirmatory factor analysis (CFA) through LISREL software for the two samples. The outcomes of the CFA are incorporated in Table 1 providing support (based on the fit indices) that the measurement model fits the data well [45,46].

Table 1 also displays the convergent validity of the PSTs JS measurement scale which is demonstrated by the fact that all the items were significant ($p < 0.05$) related to their hypothesized factors and that the standardized lambda coefficients were over 0.5 [47,48]. Cronbach's alpha coefficient was measured to assess the internal reliability or consistency of the constructs [49]. The values of these indices were found to be well above the minimum suggested value of 0.7 (see Table 1) [49]. To minimize the risk of Common Method Variance (CMV), respondents were assured of complete anonymity to minimize any possible doubts

or hesitation in completing the questionnaire. Also, Harman's one factor method and one factor CFA were used to test for the presence of CMV, and both tests indicated that CMV was not a serious threat for the data.

Table 1. CFA of the measurement model and reliability indicators.

Factor	Item	Std. Lambda	Cronbach's Alpha	
Opportunities provided for self-fulfillment (OSF)	OSF1	0.51	0.812	Indices: X^2 = 598.69 df = 289 (p = 0.0000) X^2/df = 2.03 NFI = 0.91 NNFI = 0.96 CFI = 0.97 IFI = 0.98 GFI = 0.90 RMSEA = 0.075
	OSF2	0.52		
	OSF3	0.52		
	OSF4	0.69		
	OSF5	0.70		
	OFS6	0.78		
	OSF7	0.70		
Work intensity/ load (WIL)	WIL1	0.54	0.756	
	WIL2	0.61		
	WIL3	0.80		
	WIL4	0.81		
	WIL5	0.87		
Salary/ income (SI)	SI1	0.58	0.702	
	SI2	0.50		
	SI3	0.87		
	SI4	0.81		
	SI5	0.52		
Leadership relations (LR)	LR1	0.55	0.770	
	LR2	0.78		
	LR3	0.86		
	LR4	0.40		
	LR5	0.81		
Collegial relations (CR)	CR1	0.70	0.771	
	CR2	0.63		
	CR3	0.67		
	CR4	0.73		

3.5. The MUSA Method

After the assessment of the psychometric properties of the TJS construct the data were imported into the MUSA software. MUSA, as suggested in the Section 1, is a multi-criteria preference disaggregation approach which provides quantitative measures of satisfaction considering the qualitative form of the individuals' judgments. The main objective of the MUSA method is the aggregation of individual judgements into a collective value function, assuming that the respondents' overall satisfaction depends on a set of n criteria or variables, which in our case represent work environment aspects, that contribute to TJS (see e.g., Grigoroudis and Siskos [20], for a detailed presentation of MUSA).

Based on the MUSA modeling approach (written in a linear program formulation), a number of valuable outcomes (instruments) like criteria weights (or partial satisfaction indices which indicate the criterion's relative contribution to overall satisfaction) and action (SWOT type) diagrams (IPA) can be produced by the MUSA software in a simple and easy to understand form (visualization through pie charts and diagrams). These outputs are the focus of the present paper. Regarding criteria weights, TJS is seen as a multivariate analysis problem taken as given that overall TJS depends on a set of variables representing satisfaction criteria/facets. This set of criteria is denoted as X = (X1, X2, . . . , Xn), where a particular criterion i is represented as a monotonic variable Xi. The weights of the criteria show in a range of 0–100 the level of importance of the criterion (its contribution) to overall satisfaction (see Figure 1).

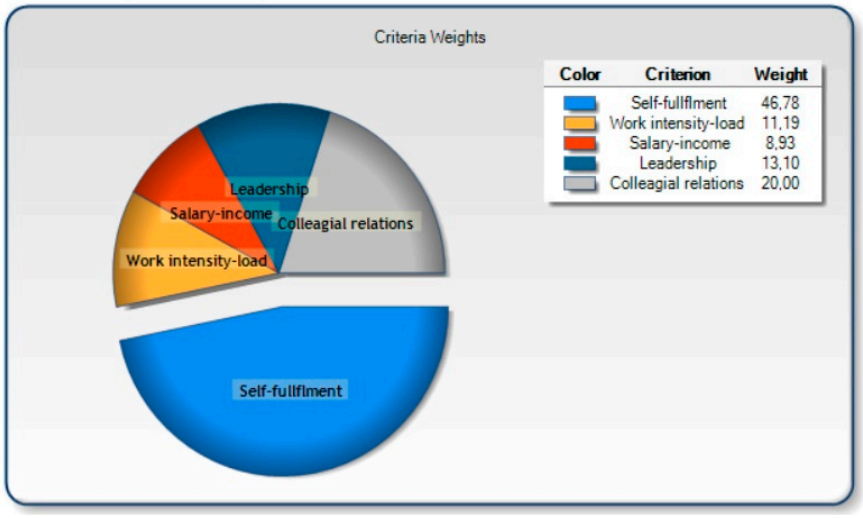

Figure 1. The contribution (weights) of facet JS to overall PSTs JS.

Another advantage of the method is that it goes a step further to provide directions for action based on a SWOT type analysis. The MUSA algorithm combines the criteria weights (criteria importance to overall JS) with the average satisfaction indices (which in the present study represent the schools' performance on these criteria i.e., PSTs facet satisfaction) to develop action diagrams [20]. These diagrams (see Figure 2) show the strong and weak points of (substitute teachers') satisfaction and define the required improvement efforts. The SWOT type diagrams are organized in four quadrants based on two axes that represent the school's performance regarding the satisfaction criterion (high/low level of substitutes' facet JS) and the importance of the criterion for the substitute teachers (high/low weight). More precisely, the satisfaction criteria located in the low performance (satisfaction)/low importance (named as status quo) quadrant require no immediate action in the immediate future. Criteria that appear in the high performance (satisfaction)/high importance (referred to leverage opportunity) quadrant are those that could offer competitive advantage to the school unit. The criteria in the high performance (satisfaction)/low importance (characterized as transfer resources) quadrant need no further action (investment) for the moment. Lastly, the elements in the low performance (satisfaction)/high importance (called action opportunity) quadrant claim prompt care by the school leaders, meaning that they represent the weak points of the school work environment in terms of PSTs overall JS.

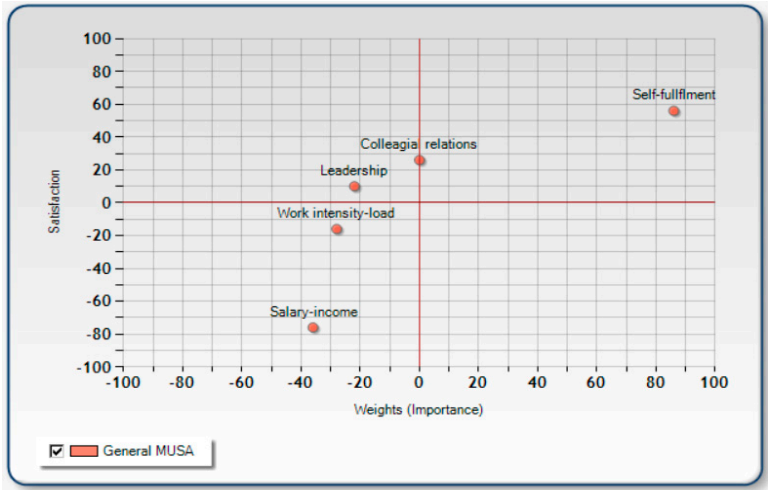

Figure 2. Schools' performance (teachers' facet satisfaction)/Importance diagram (facet weights).

4. Results

4.1. Which Aspects of Primary School Substitute Teachers' Work Environment Are Important (Valued) for Their Overall JS? (RQ1)

Figure 1 illustrates the contribution (weight/importance) of each aspect of the school work environment on PSTs overall JS. Opportunities for self-fulfillment (i.e., opportunities for achievements and applying knowledge and skills, ability to exercise full potential, respectful relations with students and parents, sense of contribution to society, pride in work and students' development), is the satisfaction criterion that contributes the most to overall PSTs JS (weight = 46.78%), followed by collegial relations (e.g., good, sincere and supportive; weight = 20%) and leadership (i.e., feelings of respect and admiration, fair treatment, caring behavior, friendly/social relations) weight = 13.10%), whilst the lower contributor is salary/income (weight = 8.93%) that refers to absolute and relative income level, subsidies, and welfare.

4.2. What Are the Weak and Strong Points of Substitute Teachers JS (RQ2) and How Could School Principals and Policy-Makers Improve PSTs Overall JS Based on Evidence-Based Knowledge (RQ3)

When making decision for improving TJS, stakeholders in education should not rely only on what is important for teachers. They should also consider teachers' perceptions of the school's performance regarding these attributes (knowledge of what is important to change right now) [40]. So, to improve the interpretation of the results that were presented previously, the action diagram incorporated in Figure 2 depicts the strong and weak points of schools in achieving high levels of PSTs JS. Self-fulfillment is the strong aspect of schools regarding PSTs JS. It is placed in the leverage opportunity (high performance -satisfaction/high importance) quadrant which means that it is a highly valued facet of the school environment for PSTs (as already indicated by the satisfaction weights analysis), whilst at the same time the schools perform well regarding this element. Therefore, although no urgent action is needed by the school leaders to improve this aspect it is important that it is monitored and preserved.

Leadership and collegial relations appear in the transfer resources (high performance/low importance) quadrant. Consequently, they are work elements that primary schools perform also highly although they seem to be of rather low importance for PSTs. So, no further investment is required. Instead resources and effort invested in these aspects could be transferred to other elements of satisfaction. Lastly, salary/income is the feature of the working environment where primary schools' performance is low, nonetheless it is also of low importance for PSTs (appear in the low performance/low importance or status quo quadrant). Although no immediate action is required, this variable calls also for close monitoring by the school leaders, given that it represents a risk factor, meaning an aspect that could easily be transferred to the low performance/high importance (action opportunity) quadrant.

5. Discussion

The present paper aimed to enhance the limited research on primary school substitute teachers in general, and job satisfaction in particular, by shedding light on the importance of key aspects of the school work environment (that is: opportunities provided for self-fulfillment, work intensity/load, salary/income, leadership relations and collegial relations) for primary school PSTs (i.e., their contribution to PSTs JS). Also, taking into consideration both the schools' performance and the importance of the above satisfaction criteria for PSTs' JS, the strong and weak points of TJS in Greek primary schools were illuminated. The research findings offer implications for theory and practice.

5.1. Implications for Theory

The present study is amongst the few that focus on an understudied and "forgotten" [18], yet important, part of the teachers' population -provisional substitute teachers- and seeks to highlight the factors of their work environment that they value the most

(work values) and can contribute -or be a potential threat- to their overall level of JS and consequently to their work engagement, excitement, and staying in the teaching profession [4–6]. On top of that, the study examines PSTs JS through the application of MUSA, a method that combines MCDA and IPA. Thus, it provides a new perspective on the study of PSTs JS, as well as evidence-based strategies for improvement interventions regarding the sustainability of the school work environment and the substitute teaching profession.

The empirical results revealed that opportunities for self-fulfillment seem to be the most important contributor to PSTs' overall JS (weight = 46.78%). This evidence is in support of relevant studies in the field which suggest that sources of satisfaction internal to teaching, such as pride and feeling of social contribution e.g., [8,50], as well as intrinsic upper level satisfaction elements e.g., exercise of full potential and pride are satisfiers [5,51]. On the other hand, external sources of satisfaction such as work intensity/load and level (actual and relative) of salary/benefits seem to be less important in configuring overall PSTs JS. These findings, particularly the one referring to the contribution of salary/income to overall JS, need to be interpreted with caution. The demographic characteristics of substitutes, as well as contextual factors may provide explanations for this outcome. PSTs are usually much younger and less experienced teachers and therefore they have lower expectations in terms of salary/income. Furthermore, in Greece, the level of (substitute) teachers' salary/income is centrally set and not related to performance, therefore fixed. Additionally, the acquired experience as substitute is a prerequisite for changing the employment status to a permanent one in the future. As a result, it seems to be easier for PSTs to accept lower levels of salaries and longer working hours [52]. Nonetheless, this intriguing evidence could be also elucidated by the cognitive dissonance theory [53]. Probably, PSTs have come to deemphasize salary/income and place increased emphasis on self-fulfillment to reduce the cognitive dissonance caused by conflicts between their expectations from their work and their real work environments. In support of this logic, the SWOT (IPA) analysis has highlighted salary/income as a risk factor for PSTs JS. Nonetheless, this is an issue that deserves further investigation.

Moreover, external satisfaction factors such as e.g., interactions with colleagues and school leaders were also revealed as a rather high contributor to overall PSTs JS. This outcome is well corroborated by previous research see e.g., [6,54,55] and suggests that although PSTs do not occupy organic-long term positions in schools, good, sincere, and supportive relations with colleagues, as well as fair treatment and caring behavior by the school principal could actually help substitutes "fit in" rather than feeling as expendable outsiders [52,56]. Indeed, teachers who participate actively in school-based learning communities develop more effective teaching practices, are more capable to solve classroom problems [55,57] and have increased perceptions of self-efficacy i.e., of their capability to complete expected tasks and regulate the relations related to the "process of teaching and educating students, as well as to become part of the organization and its political and social processes" [58], p. 684.

On top of the previous findings, the outcome of IPA (SWOT type analysis; see Figure 2) provided a deeper understanding of the critical elements of the school work environment aspects that might facilitate the individual teacher-school match. The IPA analysis helped incorporate in the TJS literature both meanings of importance provided by Locke [40]: (a) What is important in the context of PSTs' value hierarchy (criteria weights i.e., work environment aspects contribution to overall PSTs JS; see Figure 1) and (b) What is important to change right now (directions provided from action diagram; see Figure 2). Therefore, it is possible to design more effective/targeted interventions to improve the quality of the school work environment for substitute teachers and consequently boost their overall JS and intention to stay in the profession.

The IPA analysis highlighted that opportunities for self-fulfillment is the strong point of PSTs JS in Greek primary schools (a high performance/high importance element of TJS) that needs to be preserved, whilst work intensity/load and salary/income are risk factors since they could easily move to the low performance/high importance (status

quo) quadrant. So, in schools that meet the self-fulfillment needs of their PSTs, PSTs can be genuine, can implement their own ideas and make choices and thus they can gain advantages such as psychological health and growth, intrinsic motivation, well-being, optimal functioning, and self-actualization [52,59] which may reflect to the school's overall performance as well.

5.2. Implications for Practice

According to Evans [58], school leaders, central government officials and decision makers need to know what is important for teachers and need to be aware of "the key issues upon which the acceptability of an individual's work context depends" (p. 305). Our results suggest that what matters to PSTs is opportunities for self-development as well as supportive social relations. In this scenario, school leaders have a critical role to play through shaping work contexts and cultures that value teamwork, respect and development and provide a clear vision of what is important for the schools' success [56]. Also, operating a school as a learning community could add to PSTs JS [8]. The latest requires a re-culturing of schools so that teachers are willing to move beyond a traditional stance wherein teaching is an autonomous act with minimal collaboration about teaching and learning [57].

Finally, school leaders and governmental officials are advised to periodically review, with the use of MCDA methods like MUSA, changes on schools' performance regarding teachers' satisfaction with aspects of their working environment, as well as the importance they attach to them, since only then optimal decisions about enhancing TJS can be made [19].

5.3. Limitations and Future Research Avenues

This study has a number of strengths: It is an empirical study that explored a topic (PSTs JS) that has not undergone sufficient empirical research before; it collected data from randomly selected participants who represent the profession in the country; it contributes to the line of research on factors that contribute to PSTs JS and the strong and weak points of PSTs JS by applying MUSA.

However, understanding differences in teacher status and other characteristics is significant to more effectively prepare PSTs for their tasks and responsibilities. Thus, future research could focus on better understanding PSTs' perceptions regarding income/wages, social relationships, their roles and responsibilities, and their JS so that education can benefit. In addition, it might be interesting to investigate the perceptions of substitute teachers against the perceptions of full-time teachers both in the public and private sector. For this purpose both quantitative and qualitative approaches can be suitable. Additionally, an analysis of PSTs JS based on a research with a larger sample and a longitudinal component would be important. The latter would allow investigation of the relationship between important JS criteria and overall PSTs JS over time.

6. Conclusions

The present work adds to the limited research on the JS of PSTs. More precisely, the contribution of five facets of JS i.e., opportunities provided for self-fulfillment, work intensity/load, salary/income, leadership relations and collegial relations to overall PSTs JS was explored by applying MUSA. The current research findings reveal that opportunities for self-fulfillment and social relations are the most important factors in PSTs JS. Also, opportunities for self-fulfillment is the strong point of satisfaction for PSTs, whilst salary-income and work intensity could be potential threats.

Author Contributions: Conceptualization, N.G., P.M. and F.V.; methodology, P.M.; investigation, C.L.; data curation, P.M.; writing—original draft preparation, N.G.; writing—review and editing, N.G., P.M., C.L. and F.V. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable. The study involved no traceability of subjects or experimental investigations on humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

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