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Research Article

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Teachers' Attitudes Toward Performance-Related Bonuses and School Risk Management in Greece: Associations with Job Satisfaction and Affective Commitment

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Abstract

Purpose: *The purpose of this study was to explore the opinions of Greek teachers about various performance incentives and their relation to job happiness, emotional organizational commitment and perceived measures of school risk management.*

Methods: *A quantitative cross-sectional survey was conducted among 554 teachers working in elementary and secondary education schools in Greece. The data were collected using an anonymous internet poll. Metrics included pay systems, selected items from the Job Satisfaction Survey, emotional commitment, perspectives on performance related incentives and approaches to controlling economic and institutional risks. The assessments included descriptive statistics, exploratory factor analysis, Cronbach's alpha, Spearman correlations, non-parametric group comparisons and particular linear regression models.*

Results: *Favorable views of performance-based pay were associated with less satisfaction with pay, promotion possibilities, fringe benefits, performance-based rewards, procedures and communication. There was no significant relationship between type of work and job happiness. Bonus views were negatively correlated with affective commitment ($\rho = -.369$, $p < .001$). They had a strong link with economic risk-management techniques ($\rho = .678$, $p < .001$) and a poor relation with institutional strategies ($\rho = .106$, $p = .012$). However, the educators viewed the institutional risk management techniques in terms of safety policy, role delineation, strategic planning and training to be very important. Differences across groups were found for gender, educational level, work status, years of teaching experience and school sector.*

Conclusions: *The support that educators offer to a potential bonus seems to be related to the perceived shortcomings of the present rewards and organizational conditions. Institutions need to strengthen their school safety procedures, regardless of financial incentives. The study was cross-sectional and the conceptual overlap between bonuses and economic hazards was to some degree. The findings should be considered associations, not proof that bonuses cause better performance or risk management.*

Keywords: Performance-related pay; teacher job satisfaction; affective commitment; school risk management; Greece; cross-sectional survey.

1. Introduction

The role of educators is basically the quality, continuity and responsiveness of school education. However, their professional expertise and their willingness to contribute to the common objectives of the school are affected by the organizational circumstances of their employment. Thus, teacher job satisfaction is not only a general positive feeling about teaching, but a response to evaluations of important aspects of their work, such as pay, advancement opportunities, benefits, workload, recognition, relations with colleagues, communication, and the nature of the teaching profession. A recent systematic review and meta-analysis demonstrated that teachers' job satisfaction is associated to a range of professional outcomes including well-being, intentions to stay in the profession, teacher-student interactions, and work performance.

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However, the context (national and organizational) shapes the intensity and direction of such interactions [1]. Working circumstances, career prospects, professional standing, autonomy, cooperation and job security are also identified as important factors of teachers' professional experience in the international research conducted by TALIS [2].

Job satisfaction is a different concept although it is directly associated with organizational commitment. Affective commitment is the emotional tie, affiliation and involvement of an employee to an organization. Teachers who are more emotionally invested are more likely to see themselves as part of the school community and support common goals. Meta-analytical data have shown that affective commitment relates significantly to job satisfaction, but it is a distinct construct with its own antecedents and effects [3].

Financial incentives, such as performance-based bonuses, are a topic of ongoing controversy in education. The incentives are one element of a wider framework of employment and reward that includes fair compensation, decent working conditions, professional growth and clear career paths. According to self-determination theory (4), employee motivation partly depends on possibilities for autonomy, competence, recognition and meaningful participation in the life of the organization. Meta-analytic research suggests further that the reaction to external reward is contingent on the type of reward. A reward as a measure of control may have different effects than one that shows appreciation or promotes competence [5].

Further evidence from education contexts suggests caution in the use of performance based remuneration. A meta-analysis of teacher merit-pay schemes found a slight positive average effect on students' test results, but large heterogeneity between schemes and contexts [6]. The conclusion provides little reason to expect that an incentive model applied in one system of education will yield similar results in others. Any program offered must take into account local institutional frameworks, the transparency of performance appraisal, the basis on which awards are distributed and teachers' personal views of its acceptability. This present study looks into these perceptions in the Greek educational system especially in relation to performance orientated pay as a policy. It does not measure the results of a bonus program that has been established.

The policy importance of these perspectives also concerns the capacity of schools to deal with risk. Schools are obliged to provide secure learning environments and instructional continuity among ecological, technological, biological and social dangers. The Comprehensive School Safety Framework 2022–2030 takes an all-hazards, all-risks approach connecting the dots between enabling policies, risk assessment and planning, safe learning buildings, school disaster management and risk-reduction education [7]. Clear duties, trained staff, adequate resources and cooperation between the institutions concerned are essential to effective execution.

Several of these concerns have been investigated in Greece. Studies of teacher job satisfaction have found fewer positive appraisals of income, benefits and other incentives than of the intrinsic joys of teaching and contacts with colleagues [8]. Later studies have studied the relationship between job satisfaction and occupational stress and self-efficacy among teachers in conventional and special schools [9]. In Attica, studies on teachers' attitudes on biological hazards and disasters have revealed concerns on safety and a perceived need for improved risk-management planning within school communities [10,11]. However, little empirical work has been done in Greece on teachers' attitudes regarding performance-related bonuses, job satisfaction, emotional commitment and perspectives on financial and structural strategies for school risk management within a unified analytical framework.

The present study seeks to fill this gap by a cross-sectional survey of primary and secondary school teachers in Greece. It investigates the relationship between teachers' perceptions of performance-based pay and variables of job satisfaction and affective organizational commitment. The study also examines the relationship between teachers' attitudes and perceived economic and institutional requirements for school risk management. The study is guided by three research questions:

i. How are teachers' attitudes towards performance-related bonuses associated with their job satisfaction and affective organizational commitment?
ii. How are teachers' attitudes towards performance-related bonuses associated with perceived economic and institutional measures for school risk management?
iii. Do these attitudes and their associations differ according to selected demographic and professional characteristics, including gender, educational level, school sector, employment status, teaching experience and educational level served?

2. Conceptual Background and Study Objectives

Performance-related incentives are crucial to the educational policy discussion about recognizing effort, professional accountability and fostering valued practices. But their importance for students depends, in part, on how teachers interpret and evaluate them. This study investigates performance-related bonuses as a potential policy alternative for Greek schools. It does not look at an existing plan, nor does it test whether bonus payments improve teacher effectiveness, job satisfaction or school safety. The focus is on the relationships between teachers' perspectives on a possible incentive system, their work attitudes and their assessments of school risk-management measures.

Teachers may have numerous meanings attached to a prize other than the monetary value. Employees rate compensation systems in terms of fairness, recognition, autonomy, professional competence and chances for development (4), based on current views of work motivation. Financial incentives therefore are embedded within an employment context that is defined by leadership, working conditions, access to professional learning, career advancement and recognition of teachers' contributions. According to self-determination theory, external rewards can be motivating in the sense that they provide helpful feedback and acknowledge skill. If employees perceive them as controlling or irrelevant to work they consider to be professionally meaningful, they may lose their motivational value [4,5].

The research of pay-for-performance in education has been mixed. Pham et al. [6] reported in a meta-analysis variability in outcomes between different program designs and locations, pointing to the importance of implementation arrangements, the measurements used to assess performance and the institutional context of a scheme. Teachers' answers to proposed incentives may therefore raise issues about the decision-making process, the credibility of evaluation systems and the extent to which awards sufficiently acknowledge the complexity and collaborative nature of teaching. Such considerations are particularly pertinent in contexts where performance-related bonuses are not a common feature of employment agreements. The analysis does not accept a priori that teachers are for or against such incentives. It evaluates their attitudes given the organizational and policy context in which a scheme might be established.

Another part of the inquiry is job satisfaction. The idea includes employee perceptions and affective responses to their work environment, including remuneration, possibilities for promotion, supervision, communication, organizational policies, and the work itself. Teachers happiness is tied to material conditions, but also to professional autonomy, contacts with colleagues, support from school administrators and the social significance assigned to teaching [1,2]. Teachers' opinions on the proposed bonus program can be influenced by their judgement of their current employment and reward systems. Support might signal a desire for better remuneration or more recognition of professional input. Concerns may be raised regarding competitive relationships, unfair treatment or the appropriateness of performance-based assessment for educational work.

Affective organizational commitment is the employee's emotional attachment to the organization, his/her identification with the organization and involvement in its operations [3]. It is related to job satisfaction but is a separate dimension of the

employment relationship. High affective commitment among teachers could be shown by feeling that they belong to the school community and identify with its common aims. They may also respond to performance-related bonuses in terms of whether they expect such arrangements to strengthen or diminish collegial ties, professional identity and trust. "By analyzing both concepts, the study can include teachers' evaluation of their working conditions and their emotional bond to the school".

School risk management raises issues of institutional frameworks and financial provision. It is concerned with prevention and readiness, emergency response and recovery and requires clear duties, reliable communication, staff training, enough resources and co-operation between schools and external agencies. The Comprehensive School Safety Framework promotes a whole-school response to numerous threats through safe learning facilities, school disaster management, and risk-reduction education (7). Within this framework, the institutional dimension contains formal policies, operational procedures, allocated roles, training arrangements and coordinating systems. The economic dimension encompasses the resources that are available for prevention, preparedness, safety infrastructure, personnel development and recovery, and the decisions as to how these are to be allocated.

Performance-related bonuses and investment on school risk management are not for the same goal, although teachers may link them when making judgements about organizational support and funding priorities. The former concern rewards directed at people and are addressed here in the light of teachers' opinions toward their potential introduction. The former gives communal resources for safety and resilience in schools. In Greek research, the importance of teacher preparedness, availability of information and institutional support when faced with biological dangers and other emergencies has been emphasized [10,11].

The study therefore explores Greek teachers' views on the possible introduction of performance-related bonuses and examines their associations with job satisfaction, affective organizational commitment and perceptions of school risk-management arrangements. Its cross-sectional, correlational design supports the examination of relationships and differences between groups, without establishing causal effects. The study addresses the following research questions:

I. How are teachers' attitudes towards performance-related bonuses associated with job satisfaction and affective organizational commitment?
II. How are teachers' attitudes towards performance-related bonuses associated with economic and institutional school risk-management measures?
III. Do teachers' attitudes towards performance-related bonuses differ according to gender, educational level, employment status, years of teaching experience and school type?

3. Methods

3.1 Study design and participants

A quantitative survey with a cross-sectional design was used to document Greek teachers' perceptions of performance-related bonuses and to study the relationship between these perceptions and job satisfaction, affective organizational commitment and perceptions of school risk-management strategies. The data were participants' perceptions at one moment in time, self-reported. The study consequently investigated connections rather than causal effects.

The demographic of interest was the teachers working in primary and intermediate schools in Greece. Any anyone working in public or private schools at those levels of education was eligible to participate. Teachers were recruited electronically using non-probability convenience sampling, permitting participation from different areas and school settings. The total sample for the analysis consisted of 554 teachers.

Demographic and professional characteristics were registered to investigate disparities between groups in attitudes about bonuses. The questionnaire collected data on gender, age, educational credentials, teaching experience, educational level, job status, kind of school, public or private sector, geolocation, and role in the school. In this paper the analyses were carried out mainly in terms of gender, educational level, work position, teaching experience and school type.

3.2 Data collection procedure

An anonymous questionnaire hosted on Google Forms was used to collect the data. This format facilitated distribution among a large number of teachers and recorded responses electronically for subsequent statistical analysis. The questionnaire took approximately 10–15 minutes to complete.

Written information provided before the questionnaire explained the study's purpose, the voluntary basis of participation, the anonymity of responses and the restriction of data use to research purposes. Participants were encouraged to answer in accordance with their experiences and opinions, with reassurance that there were no right or wrong answers. The questionnaire did not request any information that would directly identify respondents. Following export from Google Forms, the responses were reviewed for completeness and accurate coding before being prepared for statistical analysis.

3.3 Measures

The questionnaire comprised demographic questions and five substantive measures.

A six-item scale examined the importance teachers attached to different aspects of employment rewards and compensation: adequate remuneration, promotion prospects, opportunities to apply professional skills, a lighter workload, access to training and additional rewards linked to targets. Each item was rated on a five-point Likert scale, from 1 (*not at all important*) to 5 (*extremely important)*. Internal consistency was high in this sample (Cronbach's $\alpha = .858$).

Job satisfaction was measured with 27 items selected from Spector's Job Satisfaction Survey (JSS) (12). The full instrument comprises 36 items representing nine dimensions. For this study, the selection covered aspects considered most relevant to teachers: pay, promotion, fringe benefits, contingent rewards, operating procedures, the nature of the work and communication. Responses were rated on a six-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Negatively worded JSS items were reverse-scored in accordance with the instrument's scoring guidance before composite scores were calculated, so that higher values indicated greater satisfaction. Internal consistency coefficients for the included subscales ranged from $\alpha = .584$ to $\alpha = .880$. The lower coefficients should therefore be considered when interpreting findings concerning individual JSS subscales.

Affective commitment was measured with the eight-item affective commitment subscale of the organizational commitment measure developed within the three-component model of commitment (13). Items were rated on a seven-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Negatively phrased items were reverse-scored before the total score was calculated. Higher scores represented stronger emotional attachment to, identification with and involvement in the school organization. The scale demonstrated good internal consistency in the present sample ($\alpha = .808$).

Teachers' attitudes towards additional performance-related remuneration were assessed using researcher-developed items informed by the literature review and the objectives of the study. The items addressed whether a bonus was perceived as a possible source of recognition, productivity and support for risk-prevention responsibilities, as well as possible concerns regarding fairness, professional values and tensions among staff. Responses were recorded on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Negatively worded items were reverse-scored before analysis.

Because this was a newly developed measure, its internal structure was explored through exploratory factor analysis (EFA). The final one-factor solution retained 10 items after the removal of items with very high uniqueness values. The Kaiser–Meyer–Olkin statistic was .869 and Bartlett's test of sphericity was significant, $\chi^2(45) = 2835$, $p < .001$. The factor explained 43.6% of the variance, and the final scale showed high internal consistency ($\alpha = .880$). Higher scores indicated more favourable attitudes towards the potential use of performance-related bonuses.

Perceptions of risk management were assessed with 13 items addressing the perceived necessity of economic and institutional measures for the prevention, preparedness and management of school risks. Items covered financial support for prevention and response, incentives for risk-management responsibilities, safety policy, role allocation, national planning, training and organizational structures. Responses were given on a five-point scale ranging from 1 (*not necessary*) to 5 (*essential*).

EFA was conducted for this measure because it combined adapted and researcher-developed items. Maximum likelihood extraction with Varimax rotation identified two factors: economic measures for risk management and institutional measures for risk management. The KMO value was .909 and Bartlett's test was significant, $\chi^2(78) = 6692$, $p < .001$. The two factors explained 70.1% of the total variance. Internal consistency was excellent for both the economic measures subscale ($\alpha = .934$) and the institutional measures subscale ($\alpha = .937$).

3.4 Data preparation and statistical analysis

All negatively worded items were reverse-scored before the calculation of composite scores. Scale scores were calculated so that higher values consistently represented higher levels of the relevant construct. Descriptive statistics were used to summarize participant characteristics and scale responses, including frequencies, percentages, means, standard deviations, medians and interquartile ranges where appropriate.

The internal consistency of the scales was examined using Cronbach's alpha. For the newly developed bonus and risk-management measures, EFA was performed using maximum likelihood extraction and Varimax rotation. Sampling adequacy and factorability were assessed using the KMO statistic and Bartlett's test of sphericity.

Spearman's rank-order correlation coefficient was used to examine associations between attitudes towards performance-related bonuses, job satisfaction dimensions, affective commitment and the two risk-management dimensions. The Mann–Whitney *U* test was used to compare two independent groups, while the Kruskal–Wallis test was used for comparisons involving more than two groups. Selected linear regression models were also estimated to examine adjusted associations between bonus attitudes and selected outcomes while considering relevant demographic and professional characteristics. These regression analyses were interpreted as exploratory associations and not as evidence of causal relationships. Statistical significance was set at $p < .05$.

3.5 Ethics and data availability

Participation was voluntary and anonymous. Participants were informed about the study before completing the questionnaire, and no directly identifying personal data or school identifiers were collected. Data were analyzed and reported only in aggregate form.

The anonymized dataset is available from the corresponding author on reasonable request, subject to applicable data-protection requirements.

4. Results

4.1 Participant characteristics

The study included 554 teachers working in primary and secondary education in Greece. Women represented 52.3% of the sample, and men represented 47.7%. Most participants were aged 51–60 years (46.2%) and held a postgraduate degree (50.7%). Approximately two thirds worked in secondary education (65.0%), while 35.0% worked in primary education. Most respondents were permanently employed (81.6%) and worked in public schools (85.2%). Teachers with 21–30 years of experience constituted the largest professional-experience group (35.2%).

Table 1: Demographic and professional characteristics of participants (N = 554).

Characteristic	Category	n	%
Gender	Women	290	52.3
	Men	264	47.7
Age	25–50 years	249	44.9
	51–60 years	256	46.2
	≥61 years	49	8.8
Education	Bachelor's degree	205	37.0
	Master's degree	281	50.7
	Doctoral degree	68	12.3
Educational level	Primary education	194	35.0
	Secondary education	360	65.0
Teaching experience	1–10 years	145	26.2
	11–20 years	114	20.6
	21–30 years	195	35.2
	31–40 years	100	18.1
School sector	Public	472	85.2
	Private	82	14.8
Employment status	Permanent	452	81.6
	Substitute/temporary	98	17.7
	Hourly-paid	4	0.7
Note 1: Hourly-paid teachers were retained in descriptive analyses but were not included in selected employment-status comparisons and regression models because of the very small group size.			

4.2. Reliability and factor structure of the measures

The psychometric analyses supported the use of the main composite measures. The six-item compensation-systems scale showed a one-factor structure explaining 53.4% of the variance and high internal consistency (α = .858). The 27-item selection from the Job Satisfaction Survey (JSS) was analyzed using its predefined subscales rather than EFA. Reliability coefficients varied across the seven included dimensions, from .584 for pay to .880 for nature of work.

The eight-item affective commitment scale showed good internal consistency (α = .808). The newly developed performance-related bonus scale was reduced to 10 items following EFA. The retained one-factor solution explained 43.6% of the variance and demonstrated high reliability (α = .880). Finally, EFA of the 13-item risk-management measure identified two dimensions: economic measures and institutional measures. Together, these factors explained 70.1% of the variance and both demonstrated excellent internal consistency.

Table 2: Reliability and factor structure of the main measures.

Measure	Items retained	Factor structure / variance explained	KMO	Cronbach's α
Compensation systems	6	One factor; 53.4%	.866	.858
Job satisfaction (JSS)	27	Seven predefined subscales; no EFA	—	.584–.880
Affective commitment	8	Predefined unidimensional subscale; no EFA	—	.808
Attitudes towards performance-related bonuses	10	One factor; 43.6%	.869	.880
Economic risk-management measures	6	Part of two-factor solution; total variance 70.1%	.909	.934
Institutional risk-management measures	7	Part of two-factor solution; total variance 70.1%	.909	.937
Note 2: EFA used maximum likelihood extraction with Varimax rotation. Bartlett's tests of sphericity were statistically significant for all newly examined scales (p < .001).				

4.3. Descriptive Findings

Participants attributed considerable importance to compensation systems (M = 4.18, SD = .75). Attitudes towards performance-related bonuses were moderately positive (M = 3.61, SD = .89; median = 3.70). Teachers reported moderate affective commitment overall (M = 4.49, SD = 1.10).

The JSS dimensions showed a differentiated profile. Scores for pay, promotion, fringe benefits, contingent rewards and operating procedures were comparatively low to moderate, whereas satisfaction with the nature of work and communication was higher. Because the JSS subscales contain different numbers of items, their absolute mean scores should not be compared directly; the pattern is reported descriptively.

Teachers rated institutional risk-management measures as highly necessary (M = 4.33, SD = .70), with a median of 4.57. Economic risk-management measures were also rated highly (M = 3.97, SD = 1.04), although less strongly than institutional measures.

Table 3: Descriptive statistics for the principal study variables.

Variable	Scale range	Mean	SD	Median	IQR
Compensation systems	1–5	4.18	.75	4.33	.83
Pay satisfaction	4–20	8.71	3.66	8.00	5.00
Promotion satisfaction	4–21.33	10.74	4.03	10.67	5.33
Fringe-benefit satisfaction	4–22	9.11	3.47	9.00	5.00
Contingent-reward satisfaction	4–23	10.37	3.66	10.00	5.00
Operating-procedure satisfaction	4–20	10.63	3.43	10.00	5.00
Nature-of-work satisfaction	4–24	19.29	3.34	20.00	4.00
Communication satisfaction	5.33–24	15.72	3.27	16.00	4.00
Affective commitment	1–7	4.49	1.10	4.38	1.75
Bonus attitudes	1–5	3.61	.89	3.70	1.27
Economic risk-management measures	1–5	3.97	1.04	4.33	1.50
Institutional risk-management measures	1–5	4.33	.70	4.57	1.00

4.4. Associations between bonus attitudes and work-related variables

Spearman correlations showed that positive attitudes towards performance-related bonuses were positively associated with the perceived importance of compensation systems ($\rho = .294$, $p < .001$). In contrast, bonus attitudes were negatively associated with most job-satisfaction dimensions. The strongest negative associations were observed for fringe benefits ($\rho = -.358$), operating procedures ($\rho = -.345$) and contingent rewards ($\rho = -.325$), all $p < .001$. Satisfaction with the nature of work was not associated with bonus attitudes.

Affective commitment was negatively associated with bonus attitudes ($\rho = -.369$, $p < .001$). Thus, teachers reporting stronger emotional attachment to their school tended to express less agreement with the need for performance-related bonuses. Bonus attitudes were strongly and positively associated with economic risk-management measures ($\rho = .678$, $p < .001$) and weakly associated with institutional risk-management measures ($\rho = .106$, $p = .012$).

Table 4: Spearman correlations between bonus attitudes and key study variables.

Variable	Spearman's ρ with bonus attitudes	p
Compensation systems	.294	<.001
Pay satisfaction	−.186	<.001
Promotion satisfaction	−.225	<.001
Fringe-benefit satisfaction	−.358	<.001
Contingent-reward satisfaction	−.325	<.001
Operating-procedure satisfaction	−.345	<.001
Nature-of-work satisfaction	−.020	.645
Communication satisfaction	−.199	<.001
Affective commitment	−.369	<.001
Economic risk-management measures	.678	<.001
Institutional risk-management measures	.106	.012
Note 3: N = 554 for all correlations		

4.5. Group Differences

Non-parametric comparisons indicated meaningful differences across several professional groups. In unadjusted analyses, men reported more favorable attitudes towards bonuses and higher perceived need for economic risk-management measures than women, whereas women reported higher affective commitment and stronger endorsement of institutional measures (all $p < .001$).

Teachers in secondary education reported higher affective commitment than those in primary education (median = 4.63 vs 4.13, $p < .001$). In contrast, primary-school teachers reported more favorable attitudes towards bonuses ($p < .001$) and stronger endorsement of economic measures ($p = .017$), whereas secondary-school teachers reported higher endorsement of institutional measures ($p = .014$).

Teaching experience also differentiated several outcomes. Teachers with 1–10 years of experience reported lower affective commitment than all more experienced groups ($p < .001$), but higher bonus attitudes than teachers with 21–30 and 31–40 years of experience ($p < .001$). They also assigned greater importance to economic risk-management measures ($p = .002$). Substitute teachers reported stronger support for bonuses and economic risk-management measures than permanent teachers (both $p < .001$), while permanent teachers reported higher affective commitment ($p < .001$). Teachers working in private schools also reported more favorable attitudes towards bonuses and stronger endorsement of economic measures than those in public schools (both $p < .001$).

4.5. Selected regression models

Three regression models were retained because they directly address the study objectives. First, bonus attitudes remained negatively associated with affective commitment after adjustment for gender, educational level, teaching experience

and employment status. Women and permanent teachers also reported higher affective commitment in the adjusted model.

Second, bonus attitudes were positively associated with institutional risk-management measures after adjustment for gender and educational level. Women reported higher endorsement of institutional measures, while educational level did not reach conventional statistical significance.

Third, bonus attitudes were strongly associated with economic risk-management measures. However, this result requires particular caution because the economic-measures scale includes items referring to financial incentives and bonuses. The model therefore quantifies a strong association between conceptually overlapping perceptions; it should not be interpreted as evidence that bonus attitudes independently cause support for economic risk-management measures.

Table 5: Selected linear regression models.

Outcome	N	Model fit	Significant adjusted associations
Affective commitment	550	$F(7,542) = 16.95$, $p < .001$; $R^2 = .180$	Bonus attitudes: $b = -0.281$, $\beta = -.227$, $p < .001$; women vs men: $b = 0.364$, $p < .001$; permanent vs substitute teachers: $b = 0.386$, $p = .009$
Institutional risk-management measures	554	$F(3,550) = 12.02$, $p < .001$; $R^2 = .062$	Bonus attitudes: $b = 0.146$, $\beta = .185$, $p < .001$; women vs men: $b = 0.270$, $p < .001$
Economic risk-management measures	550	$F(8,541) = 78.48$, $p < .001$; $R^2 = .537$	Bonus attitudes: $b = 0.865$, $\beta = .735$, $p < .001$; women vs men: $b = 0.144$, $p = .026$
Note 4: The affective-commitment model was adjusted for bonus attitudes, gender, educational level, teaching experience and employment status. The institutional-measures model was adjusted for bonus attitudes, gender and educational level. The economic-measures model was adjusted for bonus attitudes, gender, educational level, teaching experience, school sector and employment status. Regression findings are associational, not causal.			

5. Discussion

This study examined Greek teachers' attitudes towards prospective performance-related bonuses in relation to job satisfaction, affective organizational commitment and perceptions of school risk-management measures. Greater support for a potential bonus scheme was associated with lower satisfaction across several reward-related and organizational aspects of employment. Support for bonuses was also negatively associated with affective commitment and positively associated with perceived economic measures for managing school risks. In contrast, institutional risk-management measures were strongly endorsed overall, indicating that teachers regarded safety policy, planning, training and coordination as essential features of school governance rather than optional activities.

The inverse associations between bonus attitudes and satisfaction with pay, promotion, fringe benefits, contingent rewards, operating procedures and communication suggest that interest in bonuses may partly reflect dissatisfaction with existing employment arrangements. The strongest relationships concerned fringe benefits, operating procedures and contingent rewards. Teachers who perceived current benefits, organizational processes or forms of recognition as inadequate appeared more receptive to additional financial recognition. However, these findings do not demonstrate that introducing a bonus would resolve dissatisfaction or improve school performance. Rather, they indicate that support for a bonus may be shaped by teachers' broader assessment of the rewards, procedures and recognition available within their current working environment.

Previous research likewise shows that teachers' job satisfaction encompasses substantially more than remuneration. Professional autonomy, leadership, participation in decision-making, career opportunities, relationships with colleagues, working conditions and access to professional development all contribute to how teachers evaluate their work [1,2]. In particular, Wartenberg et al. [1] found that teachers' job satisfaction was associated with several professional outcomes, including lower turnover intentions and absenteeism and more positive teacher–student interactions. The present findings therefore support the view that bonus proposals should be considered within a broader review of employment conditions and professional recognition. Adequate salaries, transparent promotion procedures, manageable workloads and supportive organizational practices remain central to any discussion of teacher motivation and retention.

Motivation theory provides a further basis for interpreting the results. Employees may understand external rewards as acknowledgement of their contribution, particularly when they are linked to competence and fair recognition. However, unclear allocation criteria or systems that fail to recognize the collaborative character of teaching may cause such rewards to be experienced as controlling or inequitable [4,5]. The participants in the present study expressed views about a possible future bonus scheme; the study did not evaluate an existing programme or its effects. Their responses therefore indicate how they perceived this policy option, not whether its implementation would change professional behavior, improve educational outcomes or reduce school risks.

Evidence on performance-related pay also supports a cautious interpretation. The meta-analysis by Pham et al. [6] reported a small positive average effect of teacher merit-pay schemes on student test outcomes, but the effects varied substantially across programme designs and national contexts. This suggests that any potential benefit depends on how incentives are designed, implemented and evaluated. In addition, survey evidence drawn from three randomized incentive-pay programmes found that most teachers did not perceive the programmes as motivating and that the schemes did not clearly change reported instructional practice, working hours, job stress or collegiality [15]. Consequently, support for a prospective bonus in the present study should not be interpreted as evidence that a similar policy would necessarily improve teaching quality or student outcomes in Greece.

The negative association between affective commitment and bonus attitudes also warrants careful consideration. Teachers who reported a stronger emotional attachment to their school tended to express less support for performance-related bonuses. One possible interpretation is that teachers who feel connected to their school may obtain recognition, belonging and professional meaning from non-financial sources. By contrast, teachers who feel less emotionally attached to their school may be more inclined to regard additional pay as an important form of recognition or compensation. This interpretation remains speculative because affective commitment and bonus attitudes were measured at the same time and causal direction cannot be established.

This finding does not imply that committed teachers oppose fair remuneration, nor does it suggest that financial incentives are incompatible with professional dedication. Affective commitment and job satisfaction are distinct but interconnected components of the employment relationship. Both may be influenced by perceived organizational support, fairness, collegial relationships and alignment with the school's goals. Research on secondary-school teachers has shown that a collaborative culture within informal teacher groups is positively associated with job satisfaction and affective commitment, with commitment partly mediating this relationship [16]. This evidence supports the interpretation that belonging, collegial support and shared professional values may be important non-financial sources of recognition. Policy discussions should therefore avoid presenting financial incentives as the sole means of strengthening teachers' engagement.

The findings concerning risk management are particularly important. Both institutional and economic risk-management measures received substantial support from participants, although institutional measures were more strongly endorsed overall. These measures included safety policy, defined responsibilities, risk-management frameworks, training, national planning and coordination. The results are consistent with the view that effective school risk management should be based primarily on organizational capability rather than on individual financial incentives. The Comprehensive School Safety Framework identifies safe learning facilities, school safety and educational-continuity management, risk-reduction education, and enabling systems and policies as mutually reinforcing elements of school safety [7].

Recent review evidence further supports this institutional approach. Schools can contribute across prevention, preparedness, response and recovery when staff training, emergency planning, communication systems, collaboration with external agencies and adequate resources are in place [18]. The strong endorsement of institutional measures in the present study therefore accords with an approach that treats preparedness as a collective organizational responsibility. Teachers' willingness to participate in risk prevention should be supported by clear responsibilities, accessible procedures, regular training and reliable communication, rather than being made conditional upon a personal financial reward.

This does not mean that financial resources are unimportant. Preparedness requires investment in training, safety equipment, infrastructure, emergency planning and continuity arrangements. However, institutional investment differs conceptually from rewarding individuals for risk-management responsibilities. The strong positive association between bonus attitudes and economic risk-management measures should therefore not be over-interpreted. The correlation and regression coefficient were large, but the economic-measures scale included items directly referring to economic incentives and annual bonuses for risk-management tasks. The association is thus likely to reflect, at least partly, conceptual and item-content overlap. It is best understood as indicating that teachers who support bonus-related incentives also tend to endorse a wider group of financially supported risk-management measures. It cannot establish that introducing a bonus would itself improve risk management or reduce school risks.

This concern is reinforced by the fact that all variables were assessed through self-report questionnaires completed during the same survey. Common-method effects do not invalidate the observed relationships, but they may influence the magnitude of associations between closely related perceptions [14]. Future research should distinguish more clearly between attitudes towards individual incentives, objective resource availability and the actual implementation of school safety procedures. Mixed-methods research could be particularly useful in this regard. Qualitative interviews could explore whether teachers perceive bonuses as recognition, compensation for additional responsibilities, support for preparedness or a possible source of unfairness and tension among staff.

The group differences also provide useful context. Newer teachers, substitute teachers and teachers employed in private schools were more supportive of bonuses and economic risk-management measures. These patterns may reflect differences in employment security, career stage, access to resources or perceptions of organizational support. Teachers with one to ten years of experience reported lower affective commitment than more experienced teachers, while permanent teachers reported stronger commitment than substitute teachers. These findings should not be understood as fixed differences between professional groups. Instead, they suggest that employment uncertainty and early-career experiences may shape how teachers evaluate financial recognition and organizational support.

Caution is also required in interpreting differences by gender and educational level. In unadjusted analyses, women reported stronger endorsement of institutional risk-management measures and higher affective commitment, whereas men reported more favorable attitudes towards bonuses and stronger endorsement of economic measures. Primary-school teachers were more supportive of bonuses and economic measures, while secondary-school teachers reported stronger support for institutional measures and higher affective commitment. These patterns may reflect differences in organizational context, career trajectories, role expectations or daily working conditions, but the cross-sectional design does not allow their causes to be established.

The findings have several implications for Greek educational policy. First, any discussion of performance-related compensation should be located within a wider policy framework for the professionalization of teachers and school improvement. Clear criteria, defined objectives and meaningful teacher participation in the design of any scheme are essential. Teachers need to understand what is being recognized, how performance would be assessed and how fairness and consistency would be protected. Performance standards should

not reward only easily measurable outcomes or create competition between colleagues. They should reflect the collaborative and multidimensional nature of teaching, including professional development, teamwork and contribution to school improvement.

Second, any bonus scheme should be piloted and independently evaluated before wider implementation. International evidence is mixed and strongly dependent on programme design, institutional context and implementation conditions [6]. Recent evidence from a nationwide individual performance-pay reform in Portuguese public schools also illustrates the possible unintended consequences of narrowly competitive incentive structures. Martins and Ferreira [17] found that the reform was associated with lower performance on national examinations, with stronger adverse effects where competition for promotion was more intense. Although these findings cannot be directly transferred to Greece, they underline the importance of evaluating possible effects on collaboration, workload, fairness and teaching practices before any large-scale policy adoption.

Third, school risk-management policy should prioritize institutional capacity. This includes a clear national framework, safety and continuity plans at school level, defined responsibilities, regular staff training, accessible reporting procedures, adequate funding and coordination among schools, local authorities and civil-protection agencies. Financial support is necessary, but it should be directed towards creating the conditions in which prevention and preparedness can be sustained. It should not replace organizational responsibility or be treated primarily as an individual reward.

The study has several limitations. The convenience sample limits the generalizability of the findings to all teachers in Greece, despite the inclusion of participants from different educational levels and employment settings. Self-report measurement may also have introduced social-desirability and common-method bias. The cross-sectional design permits the examination of associations but not temporal ordering or causal effects. In addition, some JSS subscales showed moderate reliability coefficients, and further validation of the researcher-developed bonus and risk-management measures is required in other samples. Finally, the partial overlap between bonus-related items and economic risk-management items means that the strong association between these constructs should be interpreted as a relationship between related evaluations rather than as evidence of an independent policy effect.

5. Conclusion

This study examined how Greek teachers' attitudes towards prospective performance-related bonuses were associated with job satisfaction, affective organizational commitment and perceived school risk-management measures. Teachers who reported lower satisfaction with pay, promotion opportunities, fringe benefits, contingent rewards, operating procedures and communication expressed stronger support for additional financial incentives. In contrast, satisfaction with the nature of work was not associated with bonus attitudes. These findings suggest that interest in bonuses may reflect unmet expectations concerning recognition, rewards and organizational conditions rather than a simple preference for financial gain.

Affective commitment was negatively associated with bonus attitudes. Teachers who felt more emotionally attached to their school tended to report less need for a performance-related bonus. This finding should not be interpreted as opposition to fair remuneration among committed teachers; instead, it indicates that financial incentives are only one possible source of recognition within the school work environment.

Teachers strongly endorsed institutional risk-management measures, particularly clear safety policies, defined responsibilities, planning, coordination and continuous training. These measures should be treated as necessary features of school governance, not as activities contingent on the availability of individual bonuses. The strong association between bonus attitudes and economic risk-management measures requires caution because the two measures partly included similar content relating to financial incentives.

Future research should use longitudinal or mixed-methods designs to examine how teachers' attitudes develop over time and how they interpret reward policies in practice. Any performance-related incentive system in Greek education should first be piloted, transparently designed, co-developed with teachers and independently evaluated for fairness, feasibility, unintended consequences and potential effects on collegiality and school safety.

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