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## Why Do You Work as a Teacher? Associations Between Teachers' Work Motivation, Teaching Quality, and Well-being

## Gintautas Šilinskas

University of Jyväskylä, Finland g.silinskas@gmail.com https://orcid.org/0000-0001-5116-6877

#### Saulė Raižienė

Vilnius University, Lithuania saule.raiziene@fsf.vu.lt https://orcid.org/0000-0002-8440-5341

Abstract. This cross-sectional study investigated correlations between six types of work motivation (intrinsic motivation; integrated, identified, introjected, and external regulation; and amotivation), teaching quality, and well-being among primary school teachers. Forty Grade 3 teachers in Lithuania answered a questionnaire about their work motivation (six types), teaching quality (frequency of instruction and degree of affection), and well-being (self-efficacy and exhaustion). Concerning teaching quality, the results showed that both autonomous motivation (intrinsic motivation and integrated and identified regulation) and controlled motivation (introjected and external regulation) positively correlated with teachers' frequency of literacy and math instruction, whereas only autonomous motivation positively correlated with teachers' affection when interacting with their class. Regarding well-being, autonomous motivation positively correlated with self-efficacy, whereas amotivation positively correlated with exhaustion.

**Keywords:** Work Extrinsic and Intrinsic Motivation Scale (WEIMS), work motivation, teachers, teaching quality, well-being.

# Kodėl dirbate mokytoja? Mokytojų darbo motyvacijos, mokymo kokybės ir gerovės sąsajos

Santrauka. Šiame tyrime buvo analizuojami ryšiai tarp mokytojų darbo motyvacijos dimensijų, skiriamų savideterminacijos teorijoje, mokymo kokybės ir mokytojų gerovės. Skerspjūvio tyrime dalyvavo 40 Lietuvos mokytojų, kurios mokė trečios klasės mokinius. Tyrimo metu, remiantis mokytojų atsakymais, buvo vertinama mokytojų motyvacija dirbti mokytoja (šeši motyvacijos tipai, kurie sudaro autonominę bei kontroliuojamą motyvaciją ir amotyvaciją), mokymo kokybė (tam tikrų lietuvių kalbos ir matematikos mokymo praktikų taikymo dažnumas bei mokytojų suvoktas artumas mokiniams) ir du mokytojų gerovės rodikliai (saviveiksmingumas bei emocinis išsekimas). Tyrimo rezultatai atskleidė, jog tiek mokytojų autonominė (vidinė motyvacija, integruota ir identifikuota reguliacija), tiek kontroliuojama (introjektuota ir išorinė reguliacija) motyvacija teigiamai susijusios su lietuvių kalbos ir matematikos mokymo praktikų taikymo dažnumu, tačiau tik autonominė motyvacija teigiamai susijusi su mokytojų suvoktu artumu mokiniams. Tyrimo rezultatai taip pat parodė, kad mokytojų autonominė darbo motyvacija teigiamai susijusi su jų saviveiksmingumu, o amotyvacija – su išsekimu.

Pagrindiniai žodžiai: WEIMS, darbo motyvacija, mokytojai, mokymo kokybė, gerovė.

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## Introduction

Work motivation refers to the reasons why employees engage in work and initiate work-related behavior (Pinter, 1998). It has been suggested that employees with high work motivation perform better and feel more satisfied in their roles (Gagné & Deci, 2005; Tremblay et al., 2009). Moreover, teachers experiencing greater well-being (e.g., self-efficacy concerning their work and absence of stress and exhaustion at work) and investing more in their performance (e.g., through instructional practices and interaction with children) are more likely to successfully increase their students' motivation and achievement (Kiuru et al., 2012; Pelletier & Rocchi, 2016). Consequently, the present exploratory study investigated zero-order correlations between different types of teachers' work motivation and their teaching quality and well-being. This study is based on a small sample of Grade 3 teachers (n = 40). Thus, the results presented here are of a preliminary nature and are presented as a brief empirical report.

Work motivation can be understood through self-determination theory (SDT; Deci & Ryan, 2000; Gagné & Deci, 2005). SDT explores why people are involved in a certain type of behavior – in this study, why individuals work as primary school teachers. The theory posits that there are three types of motivation: intrinsic, extrinsic, and amotivation (Fernet et al., 2008). Extrinsic motivation can be broken down into four types of regulation - integrated, identified, introjected, and external - based on the level of internalization of motivation. This results in six types of motivation aligned along the self-determination continuum. First, *intrinsic motivation* refers to performing an activity because it is inherently enjoyable, challenging, and interesting (Morkevičiūtė & Endriulaitienė, 2023). Intrinsically motivated teachers work voluntarily without expecting any rewards. Second, integrated regulation is characterized by actions that were initially taken for external reasons but have become fully congruent with the individual's values and goals and part of their sense of self. Teachers exhibiting integrated regulation have fully incorporated motivation and work because doing so has become part of their identity – that is, who they believe they are. Third, identified regulation occurs when a person performs an activity because they identify with its value or meaning and accept it as their own. In this scenario, teachers acknowledge the overall value and importance of their role and work because they see their job as something that matters to them. Fourth, introjected regulation is characterized by self-control and ego involvement (e.g., self-esteem) and being motivated by the possibility of reducing negative feelings (e.g., guilt). Introjected regulation is present in teachers when they are motivated by self-image and work because they want other people to see them in a certain way. Fifth, external regulation occurs when individuals perform activities to attain desired consequences, such as external rewards, or to avoid punishment (Deci & Ryan, 2000). For example, teachers might teach just to get paid. Sixth, amotivation refers to a lack of any type of work motivation. In this scenario, teachers may lack the intention to effectively deal with the class; they might do it passively, or they might not believe that they can perform in the ways required of them.

These six types of motivation also represent different levels of motivation quality, with intrinsic motivation embodying the greatest quality at the highest end of the self-determination continuum (Tremblay et al., 2009). However, work is not expected to be an intrinsically motivated activity; hence, people will most likely not work unless there is some extrinsic reason to do so (Deci & Ryan, 2000, 2002; Tremblay et al., 2009). Moreover, identified regulation and integrated regulation are closely related to intrinsic motivation; thus, all three are considered types of high-quality motivation or *autonomous motivation*. In contrast, introjected and external regulation represent low-quality motivation or *controlled motivation* (Deci & Ryan, 2000). Furthermore, theoretically, amotivation is placed at the lowest end of the self-determination continuum (Deci & Ryan, 2000; Tremblay et al., 2009).

Enhancing work motivation among teachers is important, as it may relate to their teaching quality (i.e. behavior with students) and well-being (i.e. psychological experiences) (Pelletier & Rocchi, 2016; Tremblay et al., 2009). First, work motivation can be related to teaching quality in the form of more frequent involvement in instruction (e.g., literacy and math tasks in the classroom) and pedagogical activities that satisfy children's psychological needs (e.g., affection) (Pelletier & Rocchi, 2016). In their work, teachers create various literacy and math activities for students to develop their skills (Ministry of Education, Science and Sport of the Republic of Lithuania, 2008, 2017). In Grade 3, literacy activities may comprise practicing to read accurately and fluently, understand spoken and written language, and spell and write words, sentences, and texts (Ministry of Education, Science and Sport of the Republic of Lithuania, 2017). Math activities may comprise solving problems related to basic mathematical concepts (i.e. addition, subtraction, multiplication and division; Ministry of Education, Science and Sport of the Republic of Lithuania, 2008). These literacy and math activities are designed to enhance children's learning and achievement, and teachers' work motivation can enhance or diminish the variety and frequency of those instructional activities, thus indirectly relating to children's learning outcomes. Teachers not only instruct their students but are also responsible for the climate in which their instruction takes place. Research has shown the importance of teachers' interaction styles when instructing the class (Aunola et al., 2005; Kiuru et al., 2012). Previous studies of teachers' interaction styles have relied on a traditional parentingstyle paradigm and measured affection. Affection has been defined as manifestations of warmth, responsiveness, involvement, acceptance, and supportiveness (Aunola & Nurmi, 2004) and found to promote children's academic skills and behavior (Aunola & Nurmi, 2004; Kiuru et al., 2012). Thus, teachers' affection towards their students is generally encouraged, and, importantly, teachers' work motivation can relate to their classroom behaviors in terms of affection (Pelletier & Rocchi, 2016).

Second, work motivation can be related to teachers' well-being, including self-efficacy and exhaustion (Hyseni Duraku et al., 2022; Pelletier & Rocchi, 2016; Tremblay et al., 2009). Self-efficacy has been defined as individuals' beliefs about their capabilities to successfully carry out a particular course of action (Klassen & Chiu, 2010, 2011). Previous studies have shown that teachers' self-efficacy is related to children's motivational and

behavioral outcomes (e.g., task persistence and self-regulation; Davolyte et al., 2020). Previous research has also found that teachers' self-efficacy was positively correlated with their intrinsic motivation and identified regulation, and negatively correlated with introjected and external regulation as well as amotivation (Fernet et al., 2008). The teaching profession is often acknowledged as highly stressful compared to other professions (Johnson et al., 2005), and teachers often report being exhausted and stressed (Klassen & Chiu, 2010, 2011). Exhaustion – as the emotional component of burnout – has been described as feelings of strain or chronic fatigue resulting from work (Salmela-Aro et al., 2011). Thus, it is not surprising that scholars have documented that intrinsic and identified motivation are negatively correlated with job burnout and that introjected and external regulation, as well as amotivation, are positively associated with burnout (Fernet et al., 2008). Previous studies have shown that workload among workers from different organizations in Lithuania was positively related to extrinsic work motivation and did not relate to intrinsic work motivation (Morkevičiūtė & Endriulaitienė, 2023).

Taken together, the present study was therefore conducted to investigate the associations between work motivation, teaching quality, and well-being among primary school teachers in Lithuania. Investigation of these constructs and the associations between them is important because higher teaching quality, well-being, and motivation at work are more likely to bring greater gains in children's learning. Previous Lithuanian studies applying the SDT-based motivational framework have investigated employees from different types of organizations (not necessarily teachers), often combining the six types of work motivation into fewer scales, or mostly focusing on the antecedents of work motivation (e.g., organizational conditions and leadership; Endriulaitienė & Morkevičiūtė 2020; Morkevičiūtė & Endriulaitienė, 2023). Thus, we found it novel and important to focus on the specificity of teachers' work in Lithuania and to provide preliminary results on how all six types of work motivation relate to teachers' quality and well-being in the school context.

In the present study, work motivation was understood in terms of six types of motivation based on SDT (Deci & Ryan, 2000, 2002) and measured by the Work Extrinsic and Intrinsic Motivation Scale (WEIMS) (Tremblay et al., 2009). Teaching quality was understood as the quantity and quality of classroom activities, and well-being was understood as teachers' self-efficacy and exhaustion. As suggested by the SDT, we expected that more self-determined types of work motivation (intrinsic motivation, integrated regulation, and identified regulation) would positively correlate with positive outcomes of teaching quality and well-being (frequency of literacy and math activities, affection, and self-efficacy) and not be associated or be negatively associated with negative outcomes (exhaustion) (Gagné et al., 2010). In contrast, we expected that less self-determined types of work motivation (introjected regulation, external regulation, and amotivation) would positively relate to negative outcomes and not be associated or be negatively associated to positive outcomes (Gagné et al., 2010). Moreover, as suggested by SDT theorists, we expected that our results would show a simplex pattern - adjacent scales of work motivation would show more similar directions and strength of correlations than nonadjacent scales (Tremblay et al., 2009).

## Method

Participants and Procedure. The reports of 40 Grade 3 teachers from a larger longitudinal study, "Get involved! Learning in primary school" (Silinskas & Raiziene, 2021–2024), were analyzed. Ethical approval was issued by the University of Jyväskylä (number: 1599/13.00.04.00/2020; date: December 17, 2020). Initially, the principals of the 12 participating schools were approached for permission to conduct the study in their schools. Then, teachers were informed about the study and invited to participate. The teachers who agreed to participate signed online informed consent forms, then filled out the questionnaire in Lithuanian. The questionnaires were submitted between March 20 and April 21, 2023. The teachers were asked to answer questions in relation to the second half of the academic year 2022–2023 (spring semester after Christmas). The participants were all female and Lithuanian speakers working in Lithuanian-speaking schools.

Instruments. The psychometric properties of the study variables are presented in Table 1. Work motivation was measured with the SDT-based Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay et al., 2009). Responding to the question "Why do you work as a teacher?," the participants rated 18 items on a 7-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree. The WEIMS is divided into six subscales (three items each) that correspond to SDT's six types of motivation (Deci & Ryan, 2000): intrinsic motivation (e.g., "Because I derive much pleasure from learning new things"), integrated regulation (e.g., "Because it has become a fundamental part of who I am"), identified regulation (e.g., "Because it is the type of work I have chosen to attain certain important objectives"), introjected regulation (e.g., "Because I want to succeed at this job; if not, I would be very ashamed of myself"), external regulation ("For the income it provides me"), and amotivation (e.g., "I don't know; too much is expected of us") (Deci & Ryan, 2000). This translation of the scale has not been previously used. The reliability of our scales (.63–.83; Table 1) was almost identical to that in the original instrument validation (.64–.83; Tremblay et al., 2009).

Frequency of classroom practices was assessed with 25 items on a 5-point Likert scale (1 = never to 5 = a few times daily). The instrument was based on prior research (Silinskas et al., 2017; for the Grade 2 adaptation of the scale, see Silinskas & Raiziene, 2022) and modified to represent instructional activities performed in Grade 3 classrooms in Lithuania (Ministry of Education, Science and Sport of the Republic of Lithuania, 2008, 2017). The subscales measured literacy practices (16 items; e.g., "Listening comprehension," "Reading comprehension," and "Creative writing") and math practices (9 items; e.g., "Basic mathematical concepts," "Addition and subtraction of natural numbers," and "Multiplication and division of two-digit numbers").

Affection was assessed using five items (e.g., "My relationship with the students in my class is good," "I often tell my pupils how much I appreciate it that they try to do something or achieve something") from the Teacher Interactional Style Scale (Aunola et al., 2005) on a 5-point scale from 1 = completely disagree to 5 = completely agree. The scale has been used in previous studies in Lithuania (Silinskas & Raiziene, 2022).

Self-efficacy was measured with the Teachers' Sense of Efficacy Scale (short form; Tschannen-Moran & Hoy, 2001), which consists of 12 statements (e.g., "How much can you do to implement alternative strategies in your classroom?," "How much can you do to calm a student who is disruptive or noisy?") scored on a 9-point scale from 1 = I do not feel confident to 9 = I feel very confident. The same translation of the scale has been used in other Lithuanian studies (Davolyte et al., 2020).

Exhaustion was evaluated with three questions (e.g., "I feel overwhelmed by work") from the Bergen Burnout Inventory (Salmela-Aro et al., 2011) measured on a 6-point scale from 1 = completely disagree to 6 = completely agree. The scale was translated into Lithuanian for the present study.

**Table 1**Descriptive Statistics of the Study Variables

|                        | M    | SD   | Min  | Max  | Cronbach's alpha | Skewness | Kurtosis |
|------------------------|------|------|------|------|------------------|----------|----------|
| Work motivation        |      |      |      |      |                  |          |          |
| Intrinsic motivation   | 5.32 | 1.17 | 2.33 | 7.00 | 0.82             | 0.53     | 0.56     |
| Integrated regulation  | 5.58 | 1.17 | 3.00 | 7.00 | 0.83             | 0.53     | 0.94     |
| Identified regulation  | 5.03 | 1.27 | 1.50 | 7.00 | 0.63             | 0.38     | 0.14     |
| Introjected regulation | 4.35 | 1.17 | 1.00 | 6.00 | 0.69             | 0.78     | 0.32     |
| External regulation    | 3.80 | 1.26 | 1.00 | 6.33 | 0.72             | 0.40     | 0.03     |
| Amotivation            | 2.80 | 1.22 | 1.00 | 5.67 | 0.71             | 0.40     | 0.35     |
| Teaching quality       |      |      |      |      |                  |          |          |
| Literacy practices     | 3.40 | 0.39 | 2.56 | 4.19 | 0.83             | 0.12     | 0.76     |
| Math practices         | 2.97 | 0.53 | 1.89 | 4.00 | 0.79             | 0.19     | -0.53    |
| Affection              | 4.38 | 0.33 | 3.80 | 5.00 | 0.58             | 0.21     | 0.66     |
| Well-being             |      |      |      |      |                  |          |          |
| Self-efficacy          | 7.13 | 0.94 | 5.00 | 8.83 | 0.94             | 0.24     | 0.19     |
| Exhaustion             | 3.74 | 1.14 | 1.33 | 6.00 | 0.76             | 0.08     | 0.21     |

## Results

Because skewness and kurtosis were  $\pm$  2, we used parametric tests in SPSS-28 for all our analyses. We calculated the descriptive statistics (Table 1) and compared the means of the

six types of work motivation using a repeated measures ANOVA,  $F(5\ 195) = 41.705$ , p < .001,  $\eta^2 = .517$ , observed power = 1.000. All the variables showed significant mean-level differences from each other (LSD-test pairwise comparisons p < .05), except for intrinsic motivation, which was only marginally significantly different from integrated regulation (p = .094) and identified regulation (p = .061). Thus, in further analyses (Table 2), we included the correlations for autonomous motivation (a composite mean score of intrinsic motivation and integrated and identified regulation) and controlled motivation (a composite mean score of introjected and external regulation).

To investigate the associations between work motivation, teaching quality, and wellbeing, we calculated the Pearson correlations (Table 2). The frequency of literacy practices positively and significantly correlated with intrinsic, integrated, identified, and external regulation. The frequency of math practices positively and significantly correlated with intrinsic, integrated, identified, and introjected motivation. Affection significantly and positively correlated with intrinsic, integrated, and identified regulation. Self-efficacy significantly and positively correlated with intrinsic, integrated, and identified regulation. Exhaustion significantly and positively correlated with amotivation. Notably, all significant correlations indicated medium-to-large effect sizes (Cohen's d; Cohen, 1988). Moreover, the results mostly confirmed a simplex pattern of associations, indicating that adjacent scales were more similar than the nonadjacent scales. Taken together, our expectations were partially supported, as self-regulated types of work motivation significantly positively correlated with positive outcomes (literacy and math practices, affection, and self-efficacy) and did not correlate with exhaustion (negative but nonsignificant correlations). As for less self-regulated types of motivation, only amotivation significantly positively related to exhaustion, as expected; other correlations were either nonsignificant or, contrary to our initial expectations, significantly positive (i.e. a correlation between introjected regulation and math practices and a correlation between external regulation and literacy practices).

 Table 2

 Pearson Correlations Between Work Motivation, Teaching Quality, and Well-Being

|                    | Intrinsic<br>motiva-<br>tion | Integrated regulation | Identified<br>regu-<br>lation | Introjec-<br>ted re-<br>gulation | External regulation | Amotiva-<br>tion | Autono-<br>mous<br>motiva-<br>tion | Control-<br>led mo-<br>tivation |
|--------------------|------------------------------|-----------------------|-------------------------------|----------------------------------|---------------------|------------------|------------------------------------|---------------------------------|
| Literacy practices | .39*                         | .42**                 | .50**                         | .24                              | .36*                | 10               | .48**                              | .36*                            |
| Math practices     | .44**                        | .37*                  | .61**                         | .33*                             | .23                 | 05               | .53**                              | .33*                            |
| Affection          | .50**                        | .37*                  | .34*                          | .11                              | 16                  | 16               | .44**                              | 04                              |
| Self-efficacy      | .47**                        | .69**                 | .46**                         | .21                              | 17                  | 23               | .60**                              | .02                             |
| Exhaustion         | 16                           | 08                    | 13                            | .16                              | .05                 | .59**            | 14                                 | .12                             |

<sup>\*</sup>*p* < .05, \*\**p* < .01

#### Discussion

The present study investigated the six types of work motivation based on SDT (Deci & Ryan, 2000, 2002) and how they correlate with teaching quality and well-being among Lithuanian primary school teachers. First, the results showed that the frequency of instructional practices concerning literacy and math related to both autonomous motivation (intrinsic motivation and integrated and identified regulation) and controlled motivation (introjected and external regulation), whereas the interactional style of teaching – affection – related only to autonomous motivation (intrinsic, integrated, and identified motivation). Second, we found that a positive indicator of teachers' well-being – self-efficacy – significantly and positively correlated with autonomous motivation, while a negative aspect of teachers' well-being – exhaustion – significantly positively correlated with amotivation.

Based on the theoretical model of teacher motivation (Pelletier & Rocchi, 2016), different types of motivation differentially relate to teachers' behavioral (i.e. teaching quality) and psychological (i.e. well-being) outcomes. Concerning teaching quality, our results confirm the theoretical model of teacher motivation (Pelletier & Rocchi, 2016), which suggests that high-quality motivation may increase teachers' interest in the subjects they teach, develop their mastery of these subjects, and enhance creativity in teaching (e.g., greater variety and frequency of instruction). Another suggestion of the model is that high-quality motivation results in teachers using instructional styles that support students' needs (Pelletier & Rocchi, 2016). Our research confirms this. We found that high-quality (autonomous) work motivation and controlled work motivation significantly and positively correlated with instructional practices (literacy practices correlated with external motivation and math practices with introjected motivation). This is a positive finding because regardless of their motivations for working (internal or external), teachers are doing their job (i.e. instructing students). In contrast, only high-quality work motivation (autonomous motivation) correlated with affection when interacting with the class. This reveals that only this type of motivation encourages teachers to adopt interaction styles that meet children's basic psychological needs (e.g., relatedness). This distinction between the quantity and quality of the delivery of instruction is a new and important result of our study, thus suggesting a new important theoretical implication in the context of teachers' work motivation.

Concerning teachers' well-being, our research supports the findings of previous studies (Fernet et al., 2008; Klassen & Chiu, 2010) and the abovementioned theoretical considerations (Pelletier & Rocchi, 2016). We found that self-efficacy positively related to autonomous types of motivation and followed a simplex-like pattern of correlations among all types of work motivation. This confirms previous suggestions that high autonomous motivation of teachers may have an energizing effect on their work and perceptions of their own competencies (Pelletier & Rocchi, 2016). Teacher exhaustion was positively and significantly related to amotivation (Fernet et al., 2008), confirming previous suggestions that exhausted teachers may feel they are unable to positively impact their students

or make a meaningful contribution to their work (Pelletier & Rocchi, 2016). We should also note that although the teacher motivation model places self-efficacy and burnout among the outcomes of teachers' motivation, it is also possible that low self-efficacy and high exhaustion act as antecedents of low teacher motivation. This possibility should be investigated in future research.

The present study has three main limitations. First, we used concurrent data, which prevented us from drawing definitive conclusions about which factors were antecedents and which were consequences of the teachers' work motivation. The tendencies/correlations found in this study should be investigated with longitudinal and experimental designs. Second, we collected data through teachers' self-reports. This exposed our results to common-source bias (the same participants completed all the measures) and common-method bias (only one type of measure was used). Future studies would benefit from recruiting other reporters/informants and including other modes of measurement (e.g., observation of classroom instruction and interactions). Third, only 40 Grade 3 teachers were enrolled in the study, prohibiting us from running complex statistical analyses. In the future, scholars should use larger samples to enable more advanced statistical analyses and increase the power of obtaining more accurate/robust results.

From a practical point of view, professionals working with teachers should acknowledge that teachers' work motivation is a multifaceted construct and that different types of motivation may relate to different aspects of teaching quality and well-being. It is important to note that while both autonomous and controlled motivation were linked to the frequency and variety of literacy and math instructional practices, only the autonomous types of motivation were related to affection (i.e. a higher quality of classroom interaction). Furthermore, it is vital to identify and help teachers with low self-efficacy and high exhaustion, as these may indicate teachers' low autonomous motivation and high amotivation to work. Overall, understanding the factors associated with teachers' work motivation is of great significance because high-quality motivation is likely to produce larger benefits for students' learning and drive (Pelletier & Rocchi, 2016).

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