PREDICTORS OF WORK ENGAGEMENT AMONG TEACHERS IN REGINA AND SASKATOON

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Marie Jolene Catherine Schweitzer, candidate for the degree of Master of Education in Educational Psychology, has presented a thesis titled, *Predictors of Work Engagement Among Teachers in Regina and Saskatoon*, in an oral examination held on November 8, 2013. The following committee members have found the thesis acceptable in form and content, and that the candidate demonstrated satisfactory knowledge of the subject material.

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Abstract

There are numerous studies that explore employee work engagement; however, the research is lacking in the area of teacher work engagement in Saskatchewan. This study was based on archived research in which 745 teachers within two urban centers, Regina and Saskatoon, completed a survey regarding their work-life and work-related engagement. The goal of this study was to determine predictors of teacher work engagement. The results of correlational analyses revealed that both job-related control and recognition are correlated positively with work engagement. A hierarchical regression analysis determined that work-related resources are the strongest predictor of work engagement and resulted in a significant amount of variance, after first accounting for demographic variables and work-related demands. The findings in this study have implications for stakeholders such as school divisions and boards, administrators, and the community at large, as there is likely to be a positive ripple effect of teachers who are engaged in their work.
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Dedication

I would like to dedicate this thesis to my parents, and thank them for their continued support and encouragement, and for instilling in me a love of learning. I would also like to thank Christopher Smith, as well as my friends and siblings, for their love and friendship, and for helping me to maintain a school work-life balance.
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1. INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

Research on employees’ well-being in the workplace initially focused on the negative state of burnout, particularly its close link with professions in the fields of social work, health care, and education (Schaufeli, Salanova, González-Romá, & Bakker, 2002). More recently, however, the focus has shifted to an interest in the positive well-being of workers, specifically, work engagement. Work engagement has become a popular area of study in numerous fields and industries, including psychology (Alarcon & Lyons, 2011), sociology (Taipale, Selander, Anttila, & Nätä, 2011), hospitality (Slåtten & Mehmetoglu, 2011), business (Shorbaji, Messarra, & Karkoulian, 2011), and education (Parker & Martin, 2009). Much of the background research is based on a business model.

1.1.1 Definition of Work Engagement

Work engagement can be defined as a positive and persistent state of mind (Schaufeli & Bakker, 2004) that includes a personal interest in one’s work as well as satisfaction and enjoyment from the work itself (van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012; van Beek, Taris, & Schaufeli, 2011). Kahn (1990) pioneered the research on work engagement, describing the work-engaged person as one who maintains a personal identity separate from one’s work role and who does not sacrifice this identity through a strict identification with a chosen occupation. Work engagement is voluntary and variable, in that one cannot be forced into engagement, and circumstances that engage one employee may not result in engagement for another employee (Wildermuth & Pauken, 2008). The experience of work engagement is typically stable and long-lasting (Mauno, Kinnunen, & Ruokolainen,
2007; Schaufeli & Bakker, 2004; Seppälä et al., 2009), although it can fluctuate over time (Kahn, 1990).

1.1.2 Dimensions of Work Engagement

Initially the dimensions of work engagement were assumed to be energy, involvement, and efficacy, the dimensions that are in direct opposition to those of burnout (Maslach & Leiter, 1997, as cited in Schaufeli et al., 2002). Years later, Schaufeli et al. (2002) proposed that the three dimensions of work engagement are absorption, vigour, and dedication, and that work engagement should be operationalized as a distinct construct, and not simply as the opposite of burnout. The new dimensions have since become widely accepted.

Engagement is characterized by absorption in one’s work, which allows for effortless concentration, a clear mind, as well as a sense of enjoyment and engrossment (Schaufeli & Bakker, 2004). Employees who are absorbed in their work will be focused and may find themselves experiencing flow or loss of self-consciousness and a distortion in time, thinking that time is passing faster than usual (Csikszentmihalyi, 1990, as cited in Schaufeli et al., 2002; Schaufeli & Bakker, 2004). Those who are engaged in their work experience feelings of vigour, with high energy and a resilience that propels them to persist when confronted with challenge and difficulty (Schaufeli & Bakker, 2004). Feelings of vigour lead to increased effort in one’s work. An employee who is experiencing work engagement is dedicated, with a sense of pride and enthusiasm that pervades all work-related tasks (Schaufeli & Bakker, 2004).

1.1.3 Consequences of Work Engagement
Emotional and social consequences. Work engagement is typically expressed overtly by employees who are experiencing it. For example, those experiencing work engagement become entrenched in their work tasks, while remaining cognitively alert and socially connected with their colleagues (Kahn, 1990). Similarly, people who are engaged in their work employ themselves cognitively and emotionally, when they feel that it is meaningful and safe to do so, and they are psychologically available to engage (Kahn, 1990). Employees who are experiencing work engagement are typically active and present, and they display a preferred self while at work (Kahn, 1990).

Work engagement is important to an individual’s well-being and happiness (Seppälä et al., 2009). Employees who are engaged in their work contribute long hours to work tasks (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Schaufeli, Taris, & van Rhenen, 2008), however they do not neglect their personal and social well-being, as they maintain an active social life, and interests outside of work (Bakker et al., 2007). This work-life balance contributes to good mental health in work-engaged individuals as well as effective social functioning (Schaufeli et al., 2008).

Motivational and physical consequences. Those who are engaged in their work connect to their work tasks and invest energies into all aspects of their work life (Christian, Garza, & Slaughter, 2011; Kahn, 1990). They view work as challenging, fulfilling and fun, and are enthusiastic, involved, and open to new experiences (Bakker, Albrecht, & Leiter, 2011b; Bakker, Schaufeli, Leiter, & Taris, 2008; Roberts & Davenport, 2002). Typically, an employee who is experiencing work engagement will be motivated by the work itself, finding that it is stimulating,
makes good use of one’s skills, and provides opportunities to experience personal accomplishment (Roberts & Davenport, 2002).

Those who are engaged in their work are likely to experience physical health benefits (Bakker & Demerouti, 2008); although they feel tired after a long day of work, they may describe this feeling as pleasant because of its association with positive accomplishments (Bakker, Albrecht, & Leiter, 2011a).

*Work-related performance consequences.* Employees experiencing work engagement are assets of the organization for which they work. They tend to perform better than people who are not engaged in their work, and are less likely to leave their place of employment (Roberts & Davenport, 2002). There is a positive association between work engagement and job performance, and between work engagement and the ability to cope with job demands (Bakker & Bal, 2010). Employees engaged in their work were found to have an intrinsic motivation to perform well and meet work-related goals, meaning that they found the work to be inherently enjoyable and engaged in it for personal satisfaction rather than external reasons (Bakker & Xanthopoulou, 2009; Ryan & Deci, 1985; van Beek et al., 2012). Organizations need work-engaged employees (Bakker & Schaufeli, 2008), because people who are engaged in their work are more productive (Roberts & Davenport, 2002), more likely to bring in profit (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009), and less likely to take sick leave (Schaufeli, Bakker, & van Rhenen, 2009) than those who are not engaged in their work. There is also a link between innovativeness and work engagement, as those who view challenges and demands as opportunities experience increased work engagement (Slåtten & Mehmetoglu, 2011). Work engagement, particularly vigour, has been found to *crossover* between
colleagues who interact frequently, and may contribute to a positive work environment that is conducive to team work (Bakker & Xanthopoulou, 2009).

1.1.4 Distinguishing Work Engagement from Related Constructs

Work engagement is a distinct construct, different from job satisfaction (Alarcon & Lyons, 2011; Maslach, Schaufeli, & Leiter, 2001) and organizational commitment (Maslach et al., 2001). Job satisfaction refers to need fulfillment and feelings of contentment, but differs from work engagement in that it does not include the relationship that an individual has with work itself (Maslach et al., 2001). Job satisfaction is a perception of the job that one has whereas engagement is a reflection of the investment one has in the work (Alarcon & Lyons, 2011). Although distinct constructs, there is a positive association between engagement and satisfaction (Wefald & Downey, 2009).

Organizational commitment can be defined as desiring to be a part of the organization, having pride in and sharing similar goals as the organization, and a willingness to recommend the organization to others (Roberts & Davenport, 2002). While work engagement focuses on the work itself, organizational commitment focuses more on employee allegiance to the place of employment (Maslach et al., 2001). Work engagement and organizational commitment are meaningfully different with the conditions that predict one not necessarily predictive of the other (Saks, 2006). For example, work engagement is predicted by job characteristics, whereas procedural justice leads to organizational commitment (Saks, 2006). It is possible for people to experience work engagement without organizational commitment, and vice versa, however typically, people who are engaged at work tend to have organizational commitment (Roberts & Davenport, 2002). High work
engagement combined with organizational commitment results in greater satisfaction, as well as a reduced desire to leave one’s organization (Saks, 2006).

Engagement is often described as the opposite of burnout, as the two are negatively associated, with the defining characteristics of engagement (i.e. absorption, vigour and dedication) contrasting sharply with those of burnout (i.e. exhaustion and cynicism) (Schaufeli & Bakker, 2004; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). Burnout is often measured using the Maslach Burnout Inventory which has shown an inverse relationship between burnout and work engagement (Maslach et al., 2001). Work engagement is most often measured using the Utrecht Work Engagement Scale, a self-report instrument that includes the three dimensions (absorption, vigour, and dedication) (e.g., Bakker & Bal, 2010; Bakker et al., 2007; Crawford, LePine, & Rich, 2010; Schaufeli & Bakker, 2004; Van den Broeck et al., 2008).

### 1.1.5 Predictors of Work Engagement

Many researchers have focused on determining the predictors of work engagement (e.g., Bakker & Demerouti, 2008; Crawford et al., 2010; Hallberg, Johanson, & Schaufeli, 2007; Schaufeli & Bakker, 2004; Schaufeli et al., 2008). It has been suggested that there is not one single predictor of work engagement, but rather numerous predictors that can contribute to employees’ experiences of engagement (Shuck, Rocco, & Albornoz, 2011). Because much of the research in the area of work engagement has been based on a business model that may not generalize to education, the predictors of work engagement found among teachers have been examined separately.

*Predictors of Work Engagement among Teachers*
Predictors of work engagement vary between individuals, organizations, occupations, sectors, and regions (Taipale et al., 2011). A relatively recent focus in the field of Education has been on increasing work engagement among teachers (e.g., Bakker & Bal, 2010; Bakker et al., 2007; Hakanen, Bakker, & Schaufeli, 2006; Roberts & Davenport, 2002). Teachers who are engaged in their work are able to find meaning in their work, and are perceived to be more attentive to student needs (Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008b). Teachers experiencing work engagement are better able to cope with increasing demands, and can generate support (Bakker & Bal, 2010) and create opportunities for themselves (Simbula, Guglielmi, & Schaufeli, 2011). Work engagement among teachers is critical to teacher retention (Kirkpatrick, 2007, April).

The predictors that have been identified in the research to date can be collapsed into three categories: work-related demands, work-related resources, and employee characteristics. Each of these will be examined in general, and then in relation to teachers specifically.

Work-related demands. Much of the research on work-related demands has been centered on the Job-Demands Resources Model (JD-R Model), however this model does not account for the direct, positive relationship that exists between some work-related demands and work engagement, and instead focuses on the negative effects of demands (Crawford et al., 2010). There are two types of demands in a workplace setting: hindrance demands and challenge demands (Crawford et al., 2010). Hindrance demands are negatively associated with work engagement (Nahrgang, Morgeson, & Hofmann, 2011) and include role ambiguity, organizational politics, red tape (Crawford et al., 2010), physical demands (Christian et al., 2011),
job insecurity, work-to-family conflict (Mauno et al., 2007), constraints, obstacles, and unclear expectations (Harter, Schmidt, & Hayes, 2002).

In contrast, challenge demands are those that employees view as opportunities for future goal attainment, reward, personal growth, learning, mastery, and achievement (Crawford et al., 2010). A challenging work environment is a predictor of work engagement if employees believe that their time and energy investment will be meaningful, will benefit them, and will lead to a sense of accomplishment (Crawford et al., 2010; Slåtten & Mehmetoglu, 2011). Challenges such as an increased workload (Crawford et al., 2010; Hallberg et al., 2007; Van den Broeck et al., 2008), responsibility, and time urgency (Crawford et al., 2010) are positively related to work engagement. Each of these demands provides opportunities for employees to display skills and abilities that may lead to recognition and consequently goal attainment.

Although demands have an important relationship with work engagement, the most effective method of increasing work engagement is not to reduce hindrance demands or increase challenge demands, but rather to increase job resources (Schaufeli et al., 2009). An increase in levels of resources, but not demands, was found to have a positive effect on future levels of work engagement (Schaufeli et al., 2009).

Work-related demands among teachers. There is limited research that focuses specifically on demands and work engagement among teachers. Demands are usually mentioned in relation to negative states such as dissatisfaction and burnout (e.g., Bakker et al., 2007; Firestone & Pennell, 1993; Hakanen et al., 2006; Hultell & Gustavsson, 2011). Six job-demands (i.e. unmet expectations, workload,
role stress, routinization, social isolation, and a passive coping strategy) were all found to be negatively associated with work engagement in a study of 1589 teachers (Hultell & Gustavsson, 2011). Disruptive student behaviour, confrontations with students (Kirkpatrick, 2007, April), and a lack of positive feedback and guidance have all been shown to contribute to frustration and dissatisfaction, which are signs of burnout, not engagement (Firestone & Pennell, 1993). Teachers who experience imbalance between their private life and work life are less likely to be engaged in their work (Hultell & Gustavsson, 2011). Researchers suggest that more research is needed in the area of teacher demands and work engagement, as opposed to burnout, as interventions are likely to be more effective if they are created with a focus on fostering engagement rather than reducing burnout (Maslach, 2003). They suggest that future research should focus on challenge demands in the teaching profession as opposed to hindrance demands because of the positive association between challenge demands and work engagement (Crawford et al., 2010; Slåtten & Mehmetoglu, 2011).

Work-related resources. Resources make up the second category of predictors of work engagement. Work-related resources are the tangible (e.g., equipment) and intangible (e.g., support) aspects of a job that either assist an employee in achieving work tasks and goals, reduce hindrance demands, or provide opportunities for growth, learning, and development (Schaufeli & Bakker, 2004). Resources increase an employee’s ability to meet demands and work goals (Crawford et al., 2010), and resources have been recognized as one of the most significant predictors of work engagement (e.g., Crawford et al., 2010; Kim, Shin, & Swanger, 2009; Schaufeli & Bakker, 2004; Van den Broeck et al., 2008). Resources increase employee self-
confidence and performance (Xanthopoulou et al., 2009), and decrease turnover intention (Hu, Schaufeli, & Taris, 2011). As resources increase, so does one’s willingness to exert effort in achieving work-related goals (Crawford et al., 2010). This reciprocal relationship between resources and increased work engagement can be described by Social Exchange Theory, as a positive social relationship evolves when employers provide employees with adequate resources (Cropanzano & Mitchell, 2005; Saks, 2006). When employees are given resources and benefits, they are likely to reciprocate by becoming more engaged in their work. On the other hand, if these resources are not provided, the employees feel no obligation to reciprocate, thus disengaging from their work role (Saks, 2006).

**Tangible work-related resources.** Tangible resources that contribute to work engagement include salary, rewards, equipment and materials (Bakker et al., 2007). Equipment and materials are motivating because they are necessary and instrumental in completing one’s work tasks (Bakker & Demerouti, 2008). Engagement will increase if employees feel as though their needs are being met and they have the supplies that are required in order to successfully manage all aspects of their career (Van den Broeck et al., 2008). Rewards and salary are also motivating as they meet personal needs for employees (Van den Broeck et al., 2008). Engagement is likely to increase if a workplace offers advancement opportunities and the possibility to share in the success of the company (e.g., profit sharing) (Roberts & Davenport, 2002).

**Intangible work-related resources.** Intangible resources are instrumental in satisfying employee needs for autonomy, development, and belongingness (Crawford et al., 2010). Opportunities for learning (Shuck et al., 2011) and skill development,
as well as high expectations, encouragement, and supervisory coaching all nurture an employee’s growth and development (Bakker & Demerouti, 2008; Roberts & Davenport, 2002). Employee work engagement increases if employees feel important and valued and not taken advantage of by their employers (Kahn, 1990). Research has determined that if work is meaningful and flexible (Slåtten & Mehmetoglu, 2011), employees have some job-related control (Mauno et al., 2007; Pech, 2009; Weigl et al., 2010), and they are given opportunities to make a difference (Kahn, 1990), then they are likely to experience increased work engagement.

Skill variety promotes work engagement especially when the daily work tasks are simple and routine (Kim et al., 2009). Work engagement will increase if employees are given opportunities to be involved in complex tasks that combine routine tasks with new skills, allowing employees to experience feelings of competence as well as growth (Kahn, 1990; Kim et al., 2009).

A positive work environment also contributes to work engagement (Bledow, Schmitt, Frese, & Kühnel, 2011). Work engagement is influenced by day-to-day work-related events, and work engagement increases when one moves from a work situation in which there is a negative mood to one in which a positive mood is experienced (Bledow et al., 2011).

Support in the workplace is a well-researched intangible resource and predictor of work engagement (e.g., Hakanen et al., 2006; Kahn, 1990; Rhoades & Eisenberger, 2002; Saks, 2006; Taipale et al., 2011). Support can be further divided into three sections: perceived organizational support, recognition, and leadership style. Perceived organizational support is a predictor of work engagement (Saks, 2006; Siu et al., 2010). It is the belief that one’s work organization cares about one’s
well being and values individual contributions (Rhoades & Eisenberger, 2002). Perceived organizational support contributes to an employee’s feelings of meaning and purpose, and leads to increased commitment and loyalty (Rhoades & Eisenberger, 2002). Supportive management contributes to an increase in feelings of safety, thus contributing to engagement (Kahn, 1990). When employees feel supported by their organization, they are likely to reciprocate by investing time and energy into meeting the goals of the organization (Bakker et al., 2011b).

Recognition is often given in the form of feedback about one’s work performance and effectiveness (Bakker & Demerouti, 2007; Firestone & Pennell, 1993). Feedback from colleagues and supervisors contributes to an employee’s motivation (Firestone & Pennell, 1993). When an employer recognizes an employee’s contribution or a job well done, work engagement for that employee increases (Roberts & Davenport, 2002; Rutter & Jacobson, 1986).

Leadership style is related to work engagement, as managers with clear expectations and a willingness to give up some control contribute positively to employee work engagement (Kahn, 1990). Work engagement increases when employees work for transformational leaders (i.e., those who are able to inspire employees to work towards common goals, and show enthusiasm in work tasks) (Christian et al., 2011; Bass, 1999 as cited in Wildermuth & Pauken, 2008). There is a positive association between respect for one’s manager, and one’s level of work engagement (Wildermuth & Pauken, 2008).

Work-related resources among teachers. Resources predict work engagement among teachers (Bakker & Bal, 2010; Hakanen et al., 2006; Simbula et al., 2011). One representative study that focused on job resources and teachers was conducted
with 805 elementary, secondary and vocational school teachers in Finland (Bakker et al., 2007). The Finnish version of the Utrecht Work Engagement Scale was used to assess work engagement and job resources were measured using a self-report scale. The following resources were examined in relation to work engagement as well as the mitigating effect that they have on job demands: job control, supervisor support, information (i.e. the flow of information between management and employees), organizational climate (i.e. an encouraging and supportive climate), innovativeness, and appreciation (Bakker et al., 2007). Job resources were found to increase work engagement when demands were high and teachers were working under stressful conditions (Bakker et al., 2007). Resources reduced the negative effects of hindrance demands, such as student misbehaviour; therefore when teachers were experiencing high demands, resources such as job control and appreciation were increasingly important. Job-related control, however, was found to not be a predictor of work engagement among teachers if pupil misbehaviour was not also reported (Bakker et al., 2007).

School climate is related to teacher work engagement. Specifically, work engagement is predicted by the encouragement of innovation and collaboration, a sense of community, and an orderly school environment (Rutter & Jacobson, 1986). Work engagement also increases with opportunities for growth and development, and teacher input into decisions (Bakker & Bal, 2010; Rutter and Jacobson, 1986). A school environment that supports teacher autonomy is important for work engagement, as work engagement may increase as teachers have more opportunities to choose how their time and energy is invested (Kirkpatrick, 2007, April).
The nature of work tasks is related to work engagement. Twelve second-stage high school teachers (4-10 years of experience), each who personally identified as being engaged in teaching, reported being most engaged when they were participating in the teaching part of teaching as opposed to other duties (e.g. marking student work) (Kirkpatrick, 2007, April).

The positive effects of support, including organizational support, on work engagement among teachers have been illustrated in numerous studies (e.g., Bakker et al., 2007; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008a; Rutter and Jacobson, 1986). Support at the organizational level increases engagement and helps to buffer against stresses in the workplace such as student misbehaviour (Bakker et al., 2007). Teacher work engagement also increases when the teacher trusts in the principal (Chughtai & Buckley, 2009). Work engagement has also been associated with supportive principals. Research by Klusmann et al. (2008a) found that when individual variables such as age, sex, and number of teaching hours were controlled for, schools with supportive principals had higher levels of work engagement among their teachers in comparison to schools with principals who were not perceived to be supportive.

Leadership in school settings can impact levels of work engagement. If teachers feel as though they can trust their principal, they are more likely to be engaged in their work (Chughtai & Buckley, 2009). An association was found between principal authenticity and work engagement among teachers (Wang & Bird, 2011). In this study, authenticity was operationalized as strong self awareness, moral integrity, balanced processing, and relational transparency (Wang & Bird, 2011). Authentic principals develop meaningful, open relationships with
staff and show concern and support for the career advancement and success of subordinate staff members (Wang & Bird, 2011).

Recognition given by both coworkers and administrators contributes to work engagement, providing that it is not given for routine or mundane tasks (Rutter & Jacobson, 1986). The recognition of new teachers with a formal induction or by the provision of a mentor also results in increased engagement (Hultell & Gustavsson, 2011).

**Employee characteristics.** The third category of predictors of work engagement is individual characteristics, which includes demographics, personality characteristics, and goals. Work engagement has been shown to increase with age (Taipale et al., 2011; Van den Broeck et al., 2008) as well as with the freedom to choose when to quit working (van Wijhe, Peeters, Schaufeli, & van den Hout, 2011). Research on children and work engagement is equivocal, as having children at home was related to increased vigour and dedication in one study (Mauno et al., 2007), but had no effect on work engagement in another (Taipale et al., 2011). One’s job position is also related to work engagement, with those in managerial or supervisory positions experiencing higher work engagement across all dimensions (Kim et al., 2009). Temporary employees also have higher dedication to their work than those employed by an organization full-time; those in professional positions experience more engagement than those in non-professional positions (Mauno et al., 2007).

Personality characteristics can predict work engagement. Higher work engagement is associated with lower levels of neuroticism (Kim et al., 2009; Shorbaji et al., 2011), higher levels of agreeableness (Kim et al., 2009) and social optimism (Salmela-Aro, Tolvanen, & Nurmi, 2011), and a resilient, active coping style (Bakker
et al., 2008). Work engagement is also positively associated with Type A behaviour, autonomy, and achievement striving (Hallberg et al., 2007). High self-esteem and optimistic beliefs that one will adequately meet work demands and will experience positive outcomes are predictive of work engagement (Mauno et al., 2007; Salmela-Aro & Nurmi, 2007). If employees feel competent, experience high self-efficacy (Cifre, Salanova, & Rodríguez-Sánchez, 2011), and have personal values that are consistent with those of the organization, there is an increased likelihood of engagement (Wildermuth & Pauken, 2008). The personality characteristic that appears to have the greatest influence on increasing work engagement is conscientiousness (Christian et al., 2011; Kim et al., 2009).

Personal work-related goals are associated with engagement (Hyvönen, Feldt, Salmela-Aro, Kinnunen, & Mäkikangas, 2009). The more positive employees feel about their future and long term career development, the greater the likelihood that they will experience work engagement (Roberts & Davenport, 2002). If employees are indecisive regarding their career, they may experience lower levels of engagement (Konstam & Lehmann, 2011). Work related financial goals, job security goals, and progress goals all have a positive relationship with work engagement (Hyvönen et al., 2009).

**Characteristics of teachers.** Much of the research on teacher work engagement has investigated the role of individual characteristics in engagement, yet many of the findings in this area are equivocal (e.g., Klusmann et al., 2008a; Kong, 2009; Rutter & Jacobson, 1986). Female teachers have been found to have higher levels of work engagement than male teachers (Klusmann et al., 2008a; Rutter & Jacobson, 1986), however the opposite has also been identified as male
teachers scored higher than female teachers on two of the three dimensions of engagement in one study (Kong, 2009). Higher work engagement is reported among teachers working in large schools in comparison to those working in small schools, possibly due to the increased availability of resources in larger work environments (Rutter & Jacobson, 1986).

There are also equivocal in findings in relation to work experience and engagement. Higher engagement has been found in teachers with more experience (Rutter & Jacobson, 1986), yet the opposite has also been identified (Kong, 2009). Teachers with 0-5 years of teaching experience reported the highest level of engagement on all three dimensions, and those with 16-20 years of experience reported the lowest level (Kong, 2009). Similarly, teachers who had 4-10 years of experience reported being more engaged in their work than when they began teaching due to their increased confidence and competence, which increased flexibility in how they allocate their time and energy at work (Kirkpatrick, 2007, April). Conversely, older age has been associated with lower work engagement (Klusmann et al., 2008a). Due to the conflicting findings in this area, clarification is needed regarding the relationship between years of teaching experience and teacher work engagement.

Personality characteristics have been identified as predictors of teacher work engagement. Buoyancy, the ability to manage setbacks, pressures, and other challenges in the workplace, is a predictor of teacher engagement (Parker & Martin, 2009). Similarly, teachers who employ active coping strategies may experience increased engagement (Hultell & Gustavsson, 2011). The characteristics of carefulness, patience (Kong, 2009), mastery orientation, and failure avoidance
(Parker & Martin, 2009) are all strong predictors of work engagement among teachers.

Individual goals are related to teacher work engagement. The achievement of educational goals and a feeling of preparedness when entering the workforce are positively related to teacher work engagement (Hultell & Gustavsson, 2011). When beginning teachers feel as though their expectations of work life have been met, they are more likely to be engaged in their work (Hultell & Gustavsson, 2011). Plans to leave the teaching profession within five years are associated with lower work engagement (Hultell & Gustavsson, 2011).

As evidenced by the varying results of studies in different regions, work engagement can vary, not only by occupation, but also by location (Kong, 2009; Rutter & Jacobson, 1986). Support, demands and resources can vary greatly between occupations, and also within the same occupation. Also, personality characteristics that predict work engagement in one setting might differ from those that predict engagement in another setting.
2. THE PRESENT STUDY

2.1 Rationale and Model

The present study was focused on exploring the relationships between work engagement and other work-related variables, including job-related control, job position (i.e., administrator vs. teacher), education level (i.e., undergraduate degree vs. Master’s degree or higher), years of teaching experience, and work-related recognition (e.g., from colleagues) in a Canadian context. Research on work engagement among teachers is lacking, and no studies were found that examined the work engagement of teachers in Canada. This study advances our understanding of work engagement among teachers in two Canadian cities, specifically, Regina and Saskatoon. This research is relevant given that 8% of beginning teachers leave the profession after the first year (Saskatchewan Teachers’ Federation, 2009).

Previous research has found that job-related control is related to work engagement; however there is evidence to support the idea that job control is only predictive of teacher work engagement when pupil misbehaviour is accounted for (Bakker et al., 2007; Weigl et al., 2010). One goal of this study was to evaluate the relationship between job control and teacher work engagement using a partial correlation that controlled for pupil misbehaviour.

Previous studies have also reported that job position predicts work engagement, with those in managerial or supervisory roles reporting the highest levels of engagement (Kim et al., 2009). No research was found that examined the relationship between job position (i.e., administrator versus teacher) and work engagement in a school setting. Similarly, there is a paucity of research regarding
the links between work engagement among teachers and their education level (i.e., undergraduate degree versus Master’s or doctoral degree) or their years of teaching experience. The present study addressed these gaps in the literature.

Another consistent finding throughout the literature is that work-related recognition is a significant predictor of work engagement (Bakker & Demerouti, 2007; Rhoades & Eisenberger, 2002; Saks, 2006). Therefore, it was expected that work-related recognition would also be correlated positively with work engagement among teachers in this study.

The present study makes a unique contribution to the literature by further examining the ability of work-related resources to significantly predict work engagement after controlling for other variables (i.e., demographic characteristics of teachers and perceptions regarding work-related demands). Specifically, after controlling for two blocks of predictors (i.e., demographic characteristics of teachers and perceptions regarding work-related demands), the unique amount of variance accounted for by work-related resources was expected to be significant.

A model of the predictors of work engagement is provided in Figure 1. Given that work-related resources have been shown to be strongly correlated with work engagement, the strength of this relationship is emphasized.

**Figure 1.** Work-Related Resources, Demands, and Employee Characteristics as Predictors of Work Engagement
2.2 Hypotheses

The following six hypotheses were proposed in the context of the present study:

H1: Job-related control will be correlated positively with work engagement when pupil misbehaviour is controlled for. Those reporting the highest levels of control will also report higher levels of work engagement.

H2: Administrators will report higher levels of work engagement than teachers.

H3: Higher levels of educational attainment will be linked to higher levels of work engagement.

H4: Years of teaching experience will be correlated positively with work engagement. Those reporting a greater number of years of teaching experience will also report higher levels of work engagement.

H5: Work-related recognition will be correlated positively with work engagement. Teachers who report higher levels of recognition will also report high levels of work engagement.

H6: Job-related resources will predict a significant amount of variance in work engagement among teachers, after first accounting for demographic variables and work-related demands.
3. METHODOLOGY

3.1 Participants, Procedures and Materials

Participants

This study was based on archived data from a previous study conducted by Dr. Ron Martin and Dr. Rod Dolmage at the University of Regina (Martin, Dolmage, & Sharpe, 2012). Given that archived data was used, no ethical clearance was required for this study. Ethics approval for the larger study was obtained from the University of Regina Research Ethics Board, and permission was also received from all school divisions involved (see Appendices A through D). The larger study consisted of a survey of the work-life and health of teachers within Regina and Saskatoon, Canada. This research was funded by the Saskatchewan Health Research Foundation. The survey was distributed to 3090 urban school teachers (kindergarten to grade 12), with 745 responses in the final sample (i.e., a 24% response rate). The demographics of the sample can be found in Appendix E.

Procedure

The larger study began with a literature search that eventually led to the creation of a survey addressing numerous domains of the work-life of teachers, including: 1) teachers’ perceptions of the workplace, including work-related recognition, support, feedback, control, atmosphere, and benefits, 2) work-related stressors, and 3) positive aspects of work. The survey was also used to gather basic background information/demographics (e.g., position, years of experience). Teachers within three school divisions in Regina and Saskatoon were informed of the survey a week prior to its delivery. The survey, placed in the mailbox of each teacher, included detailed instructions and a postage-paid envelope to return the survey once
completed. A reminder/“thank you” card was delivered to each teacher approximately one month later.

Materials

The sections of the larger survey that are relevant to the current study are described below.

Background information. The following written instructions were given: “To begin with, we’d like to gather some background information about you and your current position. Please complete the following questions.” Participants were asked to report basic demographic information such as their age, sex, level of education and present position by either filling in a blank or circling a response.

In the context of the present study, the demographic variables that are being controlled for in hypothesis 6 are: sex, job position (i.e., teacher versus administrator), and the teachers’ number of years of work-related experience.

Work-related resources. Four separate areas of work-related resources were assessed (i.e., work-related recognition, collegial support, feedback, and control).

Participants were presented with the following written instructions: “We’d like to learn more about how you view your current position and work environment. Please read each of the following statements and indicate the degree to which it describes your current position or work environment using the following scale”. A response scale was used that required participants to express their agreement or disagreement on a scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Recognition. Participants were asked if they agreed that they received adequate recognition for the work they do as teachers from their students, parents of students, colleagues, administrators, friends and family, and the community or
society in general. The participants’ responses to these six items were summed to produce a total score.

*Collegial support.* Participants were asked if they agreed that they received adequate collegial support from colleagues, administrators, and the Saskatchewan Teachers Federation. The responses to these three items were summed to produce a total score.

*Feedback.* Participants were also asked if they received adequate feedback about their work from students, parents, colleagues, administrators and the community or society. Responses to these three items were summed to produce a total score.

*Job-related control.* In addition to this, participants were asked if they felt that they had adequate input regarding decisions made that affected their classes and their schools. Teachers in our sample were also asked if they felt that their jobs were flexible, and the degree to which they appreciated opportunities for professional growth or development. The four items related to job-related control were summed to produce a total score.

*Work-related demands.* Four separate areas of work-related demands were assessed (i.e., student misbehaviour, non-teaching duties, workload, and dissatisfaction with resources). Participants were presented with the following instructions: “We would like to learn more about the negative work-related stressors that you experience as a teacher. Below you will find a list of job-related stressors. Please read each one carefully. Indicate your level of agreement that it is a source of job related stress for you, using the following scale.” Again, a response scale was used that required participants to express their agreement or disagreement on a
scale ranging from 1 (strongly disagree) to 6 (strongly agree). There were a total of 43 items in this section (e.g., disruptive behaviour in the classroom, increased number of students with special needs in the classroom).

**Student misbehaviour.** Participants were presented with six items regarding student misbehaviour, including: (a) disruptive behaviour in the classroom; (b) rude or disrespectful behaviour in the classroom; (c) students bullying or threatening teachers; (d) being physically assaulted by students; (e) being the target of verbal abuse by students; and (f) students who violate school or classroom rules. Participants’ responses to these six items were summed to produce a total score.

**Non-teaching duties.** Participants were presented with six items regarding the non-teaching duties of teachers, including: (a) preparing for, and carrying out parent-teacher conferences; (b) creating personal program plans; (c) administrative duties such as attending meetings; (d) time spent marking students’ work or providing feedback to students; (e) spending a great deal of time preparing for the upcoming school year; and (f) seasonal pressures that involve reporting. Participants’ responses to these six items were summed to produce a total score.

**Workload.** Participants were presented with four items regarding the workload of teachers, including: (a) the perceived volume of the teachers’ workload; (b) curriculum changes; (c) increasing expectations and responsibilities; and (d) increased numbers of students with special needs in the classroom. Participants’ responses to these four items were summed to produce a total score.

**Dissatisfaction with resources.** Participants were presented with four items designed to measure their potential dissatisfaction with work-related resources, including: (a) perceptions about receiving an adequate salary; (b) not having enough
time to do their work; (c) not having enough physical resources to do their work, such as classroom supplies; and (d) using their own money to buy work-related resources. Participants’ responses to these four items were summed to produce a total score.

**Work engagement.** Work engagement was assessed in this survey using the 17-item Utrecht Work Engagement Scale (USES; Schaufeli & Bakker, 2004). The mean scores for the three USES subscales, vigor, dedication and absorption, were calculated by adding the scores on a particular subscale and dividing by the number of items in that same subscale. This method was also used to calculate the mean for the total score. The USES yields four separate scores, three subscale scores as well as one total score, each with a range between 0 and 6. Higher scores indicate higher levels of vigor, dedication, absorption, or overall work engagement. For the purposes of the present study, the total work engagement score was used as the three subscales are all highly correlated.

The USES is a reliable (i.e., Cronbach’s α values for each of the three subscales was greater than .70, and usually between .80 and .90) and valid (i.e., the construct validity was supported by factor analyses and discriminant validity analyses) measure.

Participants were given the following instructions prior to completing the measure of work engagement:

We would like to know more about how you feel about your work as a teacher. For example, we would like to know how engaged you feel in the work that you are doing. The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write “0” (zero) in the space next to the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.
3.2 Analyses

The outcome variable for all analyses in the present study is work engagement, which was assessed using the Utrecht Work Engagement Scale (USES; Schaufeli & Bakker, 2004). An alpha level of .05 was used for all analyses. SPSS 18 was used for all statistical analyses, which included a partial correlation for hypothesis one, one-way ANOVAs for hypotheses two and three, and correlations for hypotheses four and five. SPSS 18 was also used to perform a hierarchical, multiple regression for hypothesis six, in order to determine the relative influence on work engagement of three blocks of predictors (work-related demands, work-related resources, and characteristics of teachers). Three blocks of predictors were entered, beginning with characteristics of teachers which included the following: sex, job position, and years of experience. Work-related demands were entered as the second block, and work-related resources were entered as the third block of predictors. The change in the value of $R^2$ was used to determine whether each block of variables accounted for a significant and unique amount of variance in work-related engagement. A $p$ value of .05 was used to judge statistical significance of the blocks of predictors.
4. RESULTS

In order to gain a better understanding of the zero-order correlations among the study variables, a correlation matrix is presented in Table 1.

4.1 Hypothesis 1

A partial correlation was used to explore the relationship between job-related control and work engagement, while controlling for pupil misbehaviour. Preliminary analyses were performed to ensure that there were no violations of the assumptions of linearity, homoscedasticity, and normality. There was a small, negative, partial correlation between job-related control and work engagement, controlling for pupil misbehaviour, $r = -.180$, $p < .05$. Those who reported the most job-related control were less likely to report pupil misbehaviour. There is a positive correlation between job-related control and work engagement, $r = .211$, $p < .05$. Those who reported more job-related control also reported higher levels of work engagement.

4.2 Hypothesis 2

A one-way between groups analysis of variance was conducted to explore the impact of position (teacher versus administrator) on work engagement. Participants were divided into two groups, with those who reported to be vice principals or principals in the ‘administrator’ group, and all other participants in the ‘teacher’ group. There was a statistically significant difference in levels of work engagement between the two groups: $F (1, 666) = 10.59, p = .001$, $eta^2 = .016$. The mean score for teachers ($M = 77.88$, $SD = 12.82$) was significantly different from the mean score for administrators ($M = 83.30$, $SD = 10.92$). These results indicate that administrators report higher levels of work engagement than teachers.
4.3 Hypothesis 3

A one-way between groups analysis of variance was conducted to explore the impact of level of educational attainment (undergraduate versus graduate) on work engagement. Participants were divided into two groups with those reporting to have a bachelor’s degree in the ‘undergraduate’ group, and those reporting to have a master’s degree or PhD in the ‘graduate’ group. There was not a significant difference in levels of work engagement between the two groups: $F(1, 715) = 2.78, p = .096$, $\eta^2 = .004$. The mean score for those with an undergraduate degree ($M = 78.35$, $SD = 12.71$) was not significantly different from those with a graduate degree ($M = 80.47$, $SD = 12.31$). These results suggest that level of educational attainment among these teachers did not impact work engagement.

4.4 Hypothesis 4

The relationship between years of teaching experience and levels of work engagement was investigated using Pearson correlation coefficient. Preliminary analyses were performed to ensure that there were no violations of the assumptions of linearity, homoscedasticity, and normality. There was a small, positive correlation between the two variables, $r = .113, p < .05$, indicating that as years of teaching experience increase, there is also a slight increase in reported levels of work engagement.
Table 1

Inter-Correlations for the Study Variables

<table>
<thead>
<tr>
<th></th>
<th>WE</th>
<th>C</th>
<th>P</th>
<th>LE</th>
<th>TE</th>
<th>R</th>
<th>RE</th>
<th>D</th>
<th>DV</th>
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<td>WE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>C</td>
<td>.211***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>P</td>
<td>.125**</td>
<td>.226***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>LE</td>
<td>.062</td>
<td>.074*</td>
<td>.416***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TE</td>
<td>.133**</td>
<td>-.133***</td>
<td>.153***</td>
<td>.145***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>R</td>
<td>.236**</td>
<td>.438***</td>
<td>.068</td>
<td>.086*</td>
<td>-.001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>RE</td>
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<td>.705***</td>
<td>.113**</td>
<td>.061</td>
<td>-.060</td>
<td>.882***</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>D</td>
<td>.058</td>
<td>-.294***</td>
<td>-.035</td>
<td>.077*</td>
<td>-.068</td>
<td>-.195***</td>
<td>-.218***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DV</td>
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<td>-.135***</td>
<td>.176***</td>
<td>.157***</td>
<td>.999***</td>
<td>-.010</td>
<td>-.064</td>
<td>.069</td>
<td>-</td>
</tr>
</tbody>
</table>

Note.  WE = work engagement; C = control; P = position; LE = level of education; TE = teaching experience; R = recognition; RE = resources; D = demands; DV = demographic variables.

* p < .05; ** p < .01; *** p < .001.
4.5 Hypothesis 5

The relationship between work-related recognition and levels of work engagement was investigated using Pearson correlation coefficient. Preliminary analyses were performed to ensure that there were no violations of the assumptions of linearity, homoscedasticity, and normality. There was a small, positive correlation between the two variables, \( r = .236, p < .05 \), indicating that those who report higher levels of work-related recognition, also report slightly higher levels of work engagement than those who do not report high work-related recognition.

4.6 Hypothesis 6

Hierarchical multiple regression was used to assess the ability of job-related intangible resources to predict levels of work engagement, after controlling for the influence of demographic variables and work-related demands (see Table 2). Preliminary analyses were performed to ensure that there were no violations of the assumptions of linearity, homoscedasticity, normality, and multicollinearity. Demographic variables including years of teaching experience, sex (male or female), and position (teacher or administrator) were entered first, accounting for 1.5% of the variance in work engagement. Work-related demands were entered second, and the total variance explained by the model as a whole was 2.0%, \( F (4, 577) = 2.98, p < .05, R^2 = .02, R^2adj = .013 \). Job-related resources explained an additional 8.5% of the variance in work engagement, after controlling for demographics and work-related demands, \( \Delta R^2 = .064, \Delta R^2adj = .077, \Delta F (1, 576) = 40.48, p < .05 \). These results supported the hypothesis that job-related resources predict a significant amount of variance in work engagement among teachers, after first accounting for demographic variables and work-related demands.
Table 2

**Regression for the Prediction of Work Engagement among Teachers**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Variable</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$r$</th>
<th>$R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>20.74</td>
<td></td>
<td>.015</td>
<td>2.896*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sex</td>
<td>.069</td>
<td>1.632</td>
<td>.103</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Position</td>
<td>.100</td>
<td>2.367*</td>
<td>.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Years experience</td>
<td>.047</td>
<td>1.140</td>
<td>.255</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demands total</td>
<td>-.075</td>
<td>-1.791</td>
<td>.074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Sex</td>
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<td>1.829</td>
<td>.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Position</td>
<td>.098</td>
<td>2.331*</td>
<td>.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Years experience</td>
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<td>1.277</td>
<td>.202</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demands total</td>
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<td>-1.791</td>
<td>.074</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
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<td>.114</td>
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<td>Position</td>
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<tr>
<td></td>
<td>Years experience</td>
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<tr>
<td></td>
<td>Demands total</td>
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<td>-.502</td>
<td>.616</td>
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<tr>
<td></td>
<td>Resources total</td>
<td>.263</td>
<td>6.362***</td>
<td>.000</td>
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</tr>
</tbody>
</table>

Note. $n = 582$. Teacher = all primarily teaching positions, including teacher librarian; Sex (1 = male, 2 = female); Position (1 = teacher, 2 = administrator); Demands total = total score of four work-related-demands reported on using self-report scales; Resources total = total score of four work-related-resources reported on using self-report scales.

* $p < .05$; ** $p < .01$; *** $p < .001$. 


5. DISCUSSION AND CONCLUSION

The goal of the present study was to advance the research on predictors of work engagement among teachers, as no Canadian research was identified that addressed this topic. This study examined the relations between work-related engagement and job-related control, level of professional position (i.e., teacher versus administrator), level of educational attainment (i.e., undergraduate versus graduate), years of teaching experience, and work-related recognition. In addition, the current study was conducted to assess the ability of job-related resources to predict levels of work engagement, after controlling for the influence of demographic variables and work-related demands.

Job-Related Control

Previous research has suggested that job-related control may only predict work-related engagement among teachers when pupil misbehaviour is taken into account (Bakker et al., 2007). In other words, job resources have a stronger benefit when demands are high. In the current study, a partial correlation was used to explore the relationship between job-related control and work engagement, while controlling for pupil misbehaviour. A small but significant positive zero-order correlation was observed between job-related control and work-related engagement. This suggests that teachers who perceive greater levels of control over their work-related duties and responsibilities were more engaged in their work. However, in contrast to the findings of Bakker et al. (2007), when controlling for pupil misbehaviour, the relationship between job-related control and work-related engagement was negative. In other words, teachers who reported more work-related control experienced less work-related engagement. Although this result seems
counterintuitive, and inconsistent with previous research, it is likely a reflection of the fact that both work engagement and job-related control were both significantly related to pupil misbehaviour. In other words, the variance that was shared between pupil misbehaviour and the two variables of interest (i.e., work engagement and job-related control), when removed, changed the nature of the relationship between the two variables of interest.

Taking into account the small positive correlation between job-related control and work engagement, it would be beneficial for administrators and school boards to allow teachers more control in their classrooms, including more opportunities for decision making, and more autonomy when teaching the outcomes in the curricula. This finding suggests that micromanaging teachers may not be beneficial in increasing teacher work engagement, however more research is needed in this area.

The Ministry of Education, as well as individual school boards may be able to increase teachers’ feelings of control by including teachers in discussions and decisions related to education. If teachers are consulted before major decisions in education are made, perhaps teachers will take more ownership over these decisions, and they may experience feelings of more control in their work.

Teacher training programs within faculties of Education could help to increase teachers’ perceptions of work-related control by teaching more classroom management strategies, and by teaching and encouraging future educators to be proactive and more involved in their organizations.

Work-Related Recognition

Previous research has indicated that work-related recognition is a fairly robust predictor of work engagement among teachers (Rutter & Jacobson, 1986;
Hultell & Gustavsson, 2011). The results of the current study support the idea that work-related recognition is a predictor of work engagement among teachers working in urban Saskatchewan contexts. Work-related recognition can include recognition from students, parents, colleagues, administrators, friends and family, and the community. This finding has implications for all of the aforementioned stakeholders.

If students and parents provide teachers with recognition by, for instance, thanking a teacher for a job well done, or commenting on teaching methods or practices that are working effectively, work engagement for that teacher may be increased, creating a positive ripple effect for the student and parents. If teachers are more engaged, the students are likely to be more engaged as well.

Work-related recognition can be a cost-free way for school administrators, colleagues and school boards to increase work-engagement among teachers, consequently increasing teacher effectiveness and retention. Recognition can be given in an intangible cost-free form, with a thank-you, an acknowledgement, or some other display of sincere appreciation. It is possible that recognition could also be given in a tangible form, such as salary increases, however more research is needed that examines the impact of tangible resources on work engagement among teachers.

The community at large is also a stakeholder, in that community members’ tax dollars pay teacher salaries, students will eventually be expected to be contributing members of the community, and recognition can be provided without any increase in the provincial budget for education. If the wider community provides recognition to teachers for the work that they do, it seems reasonable to
assume that teacher engagement may be increased, and students are likely to receive a better education, provided by people who are passionate about teaching.

*Level of Educational Attainment*

Personal characteristics (e.g., years of teaching experience) have also been shown to predict work engagement (e.g., Klusmann et al., 2008; Rutter & Jacobson, 1986), however no research was found that examined the relationship between level of educational attainment among teachers and levels of work-related engagement. After comparing teachers with undergraduate degrees with those who have a graduate degree, no difference was found in levels of work engagement. In hypothesis three it was predicted that those with a graduate degree would have higher levels of work engagement than those with an undergraduate degree; this hypothesis was not supported.

In order to interpret this finding, it may be helpful to consider research regarding the factors that contribute to satisfaction among workers. Although work satisfaction and work engagement are distinct constructs, they are correlated (Wefald & Downey, 2009). According to the Motivation-Hygiene theory, there are five factors (i.e. satisfiers) that predict work-satisfaction including: achievement, recognition, responsibility, advancement and the nature of the work itself (Herzberg, 1966, p. 72). There are also separate, distinct factors (i.e. dissatisfiers/ hygiene factors) that lead to dissatisfaction at work, including: company policy and administration, salary, interpersonal relations, working conditions and supervision (Herzberg, 1966, p. 74). In general, the satisfiers are connected more closely to the work, whereas the dissatisfiers are more related to the environment in which the work is completed (Herzberg, 1966, p. 74). The satisfiers motivate employees toward
growth, effort, and improved performance (Herzberg, 1966, p. 74). Conversely, the
dissatisfiers have little impact on positive work performance, and serve more to prevent dissatisfaction.

In the context of the present study, it is possible that some teachers may seek higher education for extrinsic reasons (i.e., hygiene factors), rather than intrinsic motives. Extrinsic reasons for teachers to seek higher education include higher salary, rising through the teaching and administrative ranks, or the prestige of a higher-level position within the education field.

*Years of Teaching Experience*

Previous research findings regarding the relationship between teacher work engagement and years of teaching experience were conflicting, and no research studies in this area were conducted in a Canadian context. The results of the present study indicate that a small but significant positive correlation exists between work engagement and the number of years of work experience a teacher has on the job. Teachers who have many years of experience may find the demands of the job easier to manage, and they may have a repertoire of lessons and skills (e.g., classroom management skills) that allow them to feel more confident and comfortable teaching and, therefore, to be more engaged.

The small magnitude of the correlation may be interpreted as a reflection of the fact that although increasing years of service may coincide with higher levels of work engagement overall, other factors may be diluting the strength of this relationship. For example some teachers may experience decreasing levels of work engagement as their careers unfold. In addition, other extraneous variables may be exerting their effects (e.g., the health of teachers, whether or not teachers are
regularly re-assigned to different schools, adapting to changes in educational pedagogy over many years).

Work-Related Resources

Previous research has suggested that work-related resources, demands and personal characteristics can all influence levels of work engagement. A hierarchical regression analysis was used to determine the relative influence of the three categories of predictors on work-engagement, specifically looking at the influence of job-related resources after controlling for the influence of demographic variables and work-related demands. The results indicated that each of the three models was significant (i.e., each step of the hierarchical regression analysis explained unique amounts of variance in work-related engagement). More importantly, as predicted, work-related resources accounted for a significant amount of variance in work engagement among teachers after accounting for demographic information and work-related demands. This finding makes a unique contribution to the research as it involved a more sophisticated examination of the role of work-related resources in predicting work-related engagement. More precisely, the findings from this research suggest that after accounting for other variables that have been shown to predict work-related engagement (i.e., demographic variables and work-related demands), information regarding work-related resources still accounted for unique variance in the prediction of work-related engagement. This suggests that more attention should be paid to improving work-related resources among teachers in an effort to enhance work-related engagement.

The work-related resources that were assessed in this study included things like work-related recognition, collegial support, and feedback from various
stakeholders. One could argue that these types of resources represent intangible motivators. According to Herzberg’s Motivation-Hygiene theory (Herzberg, 1966, p. 72), intangible motivators such as recognition lead to work satisfaction. It is not surprising then, that intangible motivators also predict work-related engagement. These intangible motivators are another cost-free way to increase work engagement among teachers in Saskatchewan, and this finding has implications for all stakeholders in education.

Administrators and employers of teachers should consider the results of this study, because, as outlined in the introduction, work-engaged employees tend to be happier, more productive employees. Also, work engaged employees are less likely to leave their places of employment (Roberts & Davenport, 2002). Engaged teachers will likely be more motivated and dedicated, which in turn could lead to better teaching, and consequently enhanced learning. If teachers are engaged, chances are students are more likely to be engaged, and more learning will take place. Parents, the community at large, and students are able to provide resources such as feedback, recognition and support, and are able to have a direct influence on the work engagement of teachers. Teacher training programs could provide more feedback to future teachers, and more recognition to students and interns who excel in their work. If teachers are more engaged in their jobs, these stakeholders will likely see the beneficial ripple effects, as happier, more motivated teachers may have a positive influence on the students that they teach.

Future research could examine the influence of tangible resources, such as salary and benefits, in work engagement among teachers. Also, since previous research indicates that challenge demands increase work engagement, while
hindrance demands decrease work engagement, future research is needed that looks specifically at the two types of demands in relation to work engagement among teachers.

In order for education to improve in this province, teachers need to be engaged in their work. If teachers are given recognition, support, feedback and autonomy by their employers and others in the community in which they work, engagement is likely to increase, learning will likely be facilitated among students, and the number of teachers leaving the profession is bound to decrease.
6. RESOURCES


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Psychology, 52*, 397-422.

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7. APPENDICES
Appendix A:

University of Regina Research Ethics Approval
DATE: October 31, 2006

TO: Ron Martin
   Education

FROM: K. Arbuthnott
      Chair, Research Ethics Board

Re: Burnout and Work Engagement as Mediators in the Relationships of Job Characteristics with Health Problems and Early Retirement Plans (28R0607)

Please be advised that the University of Regina Research Ethics Board has reviewed your proposal and found it to be:

☐ 1. APPROVED AS SUBMITTED. Only applicants with this designation have ethical approval to proceed with their research as described in their applications. For research lasting more than one year (Section 1.F), ETHICAL APPROVAL MUST BE RENEWED BY SUBMITTING A BRIEF STATUS REPORT EVERY TWELVE MONTHS. Approval will be revoked unless a satisfactory status report is received. Any substantive changes in methodology or instrumentation must also be approved prior to their implementation.

☐ 2. ACCEPTABLE SUBJECT TO MINOR CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. ** Do not submit a new application. Once changes are deemed acceptable, ethical approval will be granted.

☐ 3. ACCEPTABLE SUBJECT TO MAJOR CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. ** Do not submit a new application. Once changes are deemed acceptable, ethical approval will be granted.

☐ 4. UNACCEPTABLE AS SUBMITTED. The proposal requires substantial additions or redesign. Please contact the Chair of the REB for advice on how the project proposal might be revised.

Dr. Katherine Arbuthnott

**Supplementary memo should be forwarded to the Chair of the Research Ethics Board at the Office of Research Services (AH 505) or by email to research.ethics@uregina.ca
Appendix B:

Regina Catholic Schools Board Approval
Regina Catholic Schools

THE BOARD OF EDUCATION OF THE REGINA ROMAN CATHOLIC SEPARATE SCHOOL DIVISION NO. 81

March 13, 2006

Ron Martin, Ph.D.
Department of Psychology
University of Regina
3737 Wascana Parkway
REGINA SK S4S 0A2

FAX (306) 337-2321

Dear Dr. Martin:

Regina Catholic Schools fully endorses your proposed research grant application as outlined in your correspondence.

Your proposed research findings will provide the four major urban boards with significant insight into teacher burnout and work engagement. Currently, as you are well aware of, your initial foray into the issues of teacher burnout and work engagement as posed in your research question is a topic of concern to Saskatchewan school boards. Given the nature of the current amalgamation processes and the inevitable outcomes that will arise out of school division amalgamations and increased accountability your findings will be very timely indeed. While your survey will target teachers in the two main urban centres the findings will also yield broader applications.

Your research will yield a sound theoretical basis which school divisions may find very useful as they address the future impact of increased accountability at the classroom and division level.

I trust this is satisfactory.

Please call if I may of further assistance.

Sincerely,

R. J. Kowalchuk
Superintendent, Curriculum and Instruction /School Operations

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Appendix C:

Saskatoon Catholic Schools Board Approval
March 13, 2006

Dr. Ronald R Martin
Assistant Professor
Department of Psychology
University of Regina
3737 Wascana Parkway
Regina SK S4S 0A2

Dear Dr. Martin:

Following receipt of the information contained in your Detailed Project Description, it is the intention of St. Paul’s R.C.S.S.D. #20 to provide support for your study in two ways. First, we will communicate through each of our principals that this research opportunity has been approved. It is anticipated that this approval and subsequent research will be shared with teachers across our division. Second, we can act as the survey distribution centre for this study. Survey materials can be forwarded to the schools via the division’s delivery system.

On behalf of our division, I wish to express our support for the research undertaking and look forward to the results.

Sincerely,

B. Bitz
Superintendent of Education

Appendix D:
Saskatoon Public Schools Board Approval
March 13, 2006

Dr. Ronald R. Martin
Assistant Professor
Department of Psychology
University of Regina
3737 Wascana Parkway
Regina, SK S4S 0A2

Dear Dr. Martin:

Subject: Letter of Support

On behalf of our organization, I am pleased to provide a letter of support in principle for the proposed project related to Teacher Stress and Burnout in Saskatchewan’s Urban Public Schools.

Given the current demands and expectations placed on classroom teachers, we feel that this is a subject worthy of investigation.

Saskatoon Public Schools administration will require some matters regarding research within our schools to be addressed prior to full implementation of this project. This would include the continued involvement and consent of staff, continued appropriate resources, and approval of such a research project according to research protocols established by Saskatoon Public Schools.

In closing, we believe this project is very valuable. We encourage continued work and collaboration in this aspect of teacher wellness. We are confident that this project will be of great value and that it will make a difference in the lives of classroom teachers.

Respectfully,

[Signature]

Dr. Scott Tulison
Coordinator: Research and Measurement

/ks
Appendix E:

Demographics of the Sample
Sample Demographics

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Sample Demographics (cont.)
Min    Max
Number of Days Spent on These Activities  3.0

*Note.* Total number of respondents = 745. In cases of missing data percentages are calculated based on the number of valid cases.