Teacher Stress and Social Support Usage

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Abstract

In this paper, we explore how the frequency of utilization of social supports is related to teacher demographics, stress factors, job satisfaction, career intent, career commitment, and the perception of a stigma attached to teacher stress. Using data from self-report questionnaires (N= 264) from teachers in northern Ontario, we found that teachers seldom spoke to their health care providers about stress and instead utilized family, friends, fellow teachers, and sometimes their principals. The frequency of which teachers accessed different social support networks did vary depending on stressor (workload, student behaviour, professional relationships, societal attitudes, and employment conditions). Teachers who frequently talked to their friends about stress had a lower sense of career intent and career commitment. Males were less likely to talk to their various social supports about stress. This study adds to the literature by exploring the frequency of contact with and usage of social supports and their impact on teacher stress and perspectives on teaching.

Key Words: Teacher stress, social support, job satisfaction, career intent, career commitment

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There is an established research base indicating that the mental health of employees impacts absenteeism, occupational disability, and early retirement (Baumann &Muijen, 2010). In the profession of teaching, stress is an important issue for all stakeholders in education. A teacher's performance may suffer owing to high levels of stress and this may impact on student learning (Borg & Riding, 1991; Brown, Ralph, & Brember, 2002; Manthei & Gilmore, 1996). For school administrators, there appears to be a high cost of teacher stress in terms of human resources. The Global Business and Economic Roundtable on Addiction and Mental Health researched data from the Ontario Teachers Insurance Plan and found that the rate of stress-related long-term disability among Ontario teachers is a third higher than in other professions (Harvey, 2004). More recently, in their study of Alberta teachers, Duxbury and Higgens (2013) found that teachers are more likely to report a depressed mood, be less committed to their organization, and have lower job satisfaction than other professional groups. Teacher stress impacts teacher absenteeism and work-related illnesses (Naghieh, Montgomery, Bonell, Thompson, & Aber, 2015). Stress also contributes to teacher attrition (Clark & Antonelli, 2009; McIntyre, 2006).

Purpose of the Research

In our previous research, we examined various aspects related to teacher stress in northern Ontario. We examined the prevalence of stress, the factors that cause stress and the stigma of teacher stress (Ferguson, Frost, Kirkwood, & Hall, 2007). We have also researched which stress related factors predict two dimensions of teacher stress (anxiety and depression) and teacher job satisfaction (Ferguson, Frost, & Hall, 2012). We wanted to know more about the possibility of social supports affecting teacher stress and other factors in their professional lives that contribute to stress. In this paper, we extend our analysis from our previous work (Ferguson et al., 2007; Ferguson, Frost, & Hall, 2012) to explore the impact of social supports based on the frequency with which teachers spoke to others about stress. While other research in the extant literature has mostly explored social supports, teacher stress, and a possible buffering effect (Greenglass, et al.,1994; Greenglass, Fiksenbaum, & Burke, 1996; Greenglass, Burke & Konarski, 1997; Qin & Zhu, 2007), our research is unique in that we are exploring the frequency of contact with social supports and how this contact is related to demographic characteristics, teacher stressors, a perceived stigma of teacher stress, job satisfaction, career intent, and career commitment. This research is significant, as teacher attrition is an area of concern, as some studies suggest that high numbers of teachers are considering leaving teaching (Duxbury & Higgens, 2013) and that collegial supports could reduce this number (Mäkelä, Hirvensalo, & Whipp, 2014; Smethem, 2007).

Research Questions

1. Do certain stressors impact the frequency of utilization of social supports among teachers?
2. Does teacher gender or other demographic characteristics affect the frequency of utilization of use of social supports?
3. Does the perception of a stigma related to teacher stress affect the frequency of utilization of social supports?
4. Does the frequency of utilization of social supports impact teacher job satisfaction, career intent, and career commitment?

Teacher Stress

Workplace stress and the stressor-strain relationship has been a popular subject of inquiry since the 1970s (see Bowling Alarcon, Bragg, & Hartman, 2015) and workplace stress has been associated with illness (Cooper, Dewe, & O'Driscoll, 2001; Duxbury & Higgens, 2013; Nixon, Mazzola, Bauer, Krueger, & Spector, 2011), absenteeism (Duxbury & Higgens, 2013), negative worker attitudes (Spector & Jex, 1998), and poor job commitment (Chen & Spector, 1992). Teacher stress can be defined as "the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher" (Kyriacou, 2001, p. 28).

Reports from Canada demonstrate the issue of teacher stress is an area of concern. In 2001, the Canadian Teachers' Federation reported that six in ten teachers indicated that their job was more stressful than it had been two years earlier. A study by the Ontario College of Teachers of 2001 education graduates found that the second most common reason that graduates were no longer members in good stranding with the Ontario College of Teachers was that the "working conditions were too stressful" (McIntyre, 2006, p. 48). In Newfoundland and Labrador, Dibbon (2004) reports that teachers are experiencing role intensification and its associated stress are negatively impacting both teachers' personal lives and their ability to meet students' needs in the classroom.

The Ontario College of Teachers surveyed teachers in 2006 and reported that 13% of teachers felt stressed all the time, compared to only 7% of the general public (Jamieson, 2006). Coulter and Abney (2009) found that Ontario trained teachers working in Canada were more likely to suffer from burnout than their Ontario trained counterparts working abroad in international schools. In their study of Ontario teachers who retired early and/or left the profession, Clark and Antonelli (2009) reported that workload and stress issues were commonly cited reasons why teachers abandoned the profession. Naylor and White (2010) found that two thirds of teachers in BC state that their stress and workload is more than it was five years ago. One fifth of teachers are considering leaving the profession (for reasons other than retirement) and state that the reasons include, "workload, stress and burnout, health conditions aggravated by stress, lack of encouragement, job insecurity, and dissatisfaction with provincial and district governance" (Naylor & White, 2010, p. v). Naylor and White (2010) also report that of those teachers taking a leave of absence for illness, disability or stress-related, 51.5% state that workload contributed as a reason for their leave. The Elementary Teachers' Federation of Ontario (2012) stated that 77% of local union presidents identified workplace mental stress as a great or major concern impacting teachers.

A survey of nearly 1000 teachers by The Saskatchewan Teachers' Federation (STF, 2013) found that Saskatchewan teachers report role intensification and increased time spent on work-related activities attributed to changes directed by the school divisions and government. This increase of time spent on work encroached on teachers' personal lives and over half of teachers report dissatisfaction with work-life balance (STF, 2013). While the majority of teachers felt that stress was an unavoidable aspect of the profession, 42% strongly agreed and 33% moderately agreed that workload was a cause of stress (STF, 2013). Over 8000 Canadian teachers completed a survey distributed by the Canadian Teachers' Federation (CTF) in 2014. CTF (2014) reports 79% of teachers believe their stress related to work-life imbalance has increased over the last five years and the biggest stressor for teachers was not being able to

devote enough time to individual students. The Ontario Secondary School Teachers' Federation (Johnston-Gibbens, 2014) found that 41.4% of secondary schools reported an increase and 30.3% indicated a significant increase of overall levels of work stress in the past 5 years.

Duxbury & Higgens (2013) conducted a national study about work-life balance in Canada; over 25 000 workers completed the survey, with 2 462 identifying as being a member of the Alberta Teachers' Association. Work-life conflict was also found to be significantly high for Alberta teachers when compared to other professions and impacts teacher absenteeism, productivity, and use of employee benefits (Duxbury & Higgens, 2013). Workload stress is significant for teachers; as Duxbury and Higgens (2013) report, Alberta teachers spend 10 more hours working per week compared to other working professionals in Canada and experience twice the role-overload compared to other professions. This work-life stress is likely due to the lack of flexibility in teaching, with teachers indicting significantly less employer flexibility than all professions, including policing and nursing (Duxbury & Higgens, 2013). Duxbury and Higgens (2013) also find that teachers are less committed to their organization, are more likely to leave the profession, and have lower job satisfaction when compared to other professional workers. Seventy percent of Alberta teachers report high levels of stress compared to 57% of the total of all professionals (Duxbury & Higgens, 2013); in addition, Alberta teachers were more likely to report depressed mood (47%) than other professionals (36%) (Duxbury & Higgens, 2013)

The problem of high levels of teacher stress is not limited only to Canada. For instance, Leung, Wah Mak, Yu Chui, Chiang, & Lee (2009) found that 38.6% of high school teachers in Hong Kong report strong maladaptive stress, in addition to 30.3% suffering from severe to extremely severe anxiety and 12.3% severe to extremely severe depression. In their study, Bannai, Ukawa, and Tamakoshi (2015) report psychological distress was identified in 47.8% of male and 57.8% of female junior high school teachers in Japan.

Impact of Social Supports on Teacher Stress

Variables such as social support, personality, and self-efficacy have the potential to impact and possibly reduce stress reactivity and strains (Lazarus, 1966; 1999). In regards to social supports, the extant literature affirms that there is a connection between teacher stress and social supports. For instance, Griffith, Steptoe, and Cropely (1999) reported that teachers with high job stress have low social support at work. Richards (2012) found that the most common method of coping with teacher stress is relying on the relationships of friends and family. Leung, Wah Mak, Yu Chui, Chiang, & Lee (2009) found that teachers with high levels of stress management also reported higher levels of coping resources, including social supports, when compared to their peers with lower levels of stress management. The content of the social support received may also impact stress levels. For instance, Kahn, Schneider, Jenkins-Henkelman, and Moyle, (2006) found positive and negative conversations about the teaching profession effect burnout:

> teachers who engaged in more (vs. fewer) communications with positive content with coworkers (i.e., positive emotional social support) experienced lower levels of job burnout, and teachers who engaged in more (vs. fewer) communications with coworkers dealing with negative content (i.e., negative emotional social support) experienced higher levels of job burnout (p. 799).

The hypothesis that social support can mediate the effect of stress has been proposed for decades (House, 1981). Greenglass (1993) states that social supports serve three distinct

functions for an individual:

> First, interpersonal relationships may contribute to health because they are a source of acceptance and intimacy, i.e. emotional support. Second, there is consensus that social support may provide useful information, advice and guidance, i.e. informational support. Third, people may assist with instrumental problems by providing financial assistance, goods, or services, i.e. instrumental support (p. 325).

While the link between social supports and teacher stress is evident in the literature, there are, however, mixed results in regard to social supports actually reducing teacher stress. Some studies report that social supports can influence teacher stress levels, including the extreme manifestation of stress, burnout. For instance, Russell, Altmaier, and Van Velzen (1987) reported that teachers who receive social support from supervisors, particularly with regard to reassurance of worth, were less vulnerable to teacher burnout. Fimian (1986) found that support from school administrators and teaching peers moderated stress among American special education teachers; however, teachers were more likely to receive support during times of stress from their peers than from administrators.

Pierce and Molloy (1990) found that Australian teacher burnout levels were higher among those with lower social supports. In their study of teacher burnout over time, Greenglass, Fiksenbaum, and Burke (1994) found that teacher burnout levels depended both on work stress and on the social support that teachers received from friends and relatives one year earlier. Overall, Greenglass, et al. (1994) found that social support had an overall buffering effect on teacher stress. In a follow up study, Greenglass, Fiksenbaum, and Burke (1996) reported that, of the three sources of social support (supervisor, co-workers, and family and friends), a teacher's co-workers are the most important buffers of the burnout manifestation of emotional exhaustion. Further analysis by Greenglass, Burke and Konarski (1997) revealed that social support, particularly from one's co-workers, predict teacher burnout; in particular, co-worker social support predicted decreased depersonalization and increased feelings of accomplishment. Qin and Zhu (2007) found that support from a teacher's supervisor is the most effective in alleviating stress and feelings of emotional exhaustion, and reduced accomplishment, while support from family and friends is the most effective in mitigating depersonalization.

Other studies report that social supports do not buffer teacher stress levels. Sheffield, Dobbie, and Carroll (1994) found that social supports do not generally predict the psychological health and well-being of teachers. Burke and Greenglass (1994) also found no effect from social supports on teacher job satisfaction, lifestyle behaviors, and self reported physical health. In a different report, Burke and Greenglass (1996) found that social supports do not predict psychological burnout among teachers. Cheuk and Wong (1995) investigated whether social supports have a buffering effect on teacher burnout of teachers in Macau. They found no significant results indicating that the social supports mediate teacher burnout.

There is also an emerging body of research looking at the impact of social media and online communities as a form of social support. For instance, Deryakulu and Olkun (2007) found that an online discussion community for teachers can provide emotional and instrumental support. Leung, Chiang, Chui, Lee, and Mak's (2011) found that novice teachers in Hong Kong reported that online discussion forums acted as a form of stress management.

Gender and its Relationships to Stress and Social Supports

The CTF (2014) reports that gender impacts aspects teacher stress levels. For instance,

"Women were more likely than men to report experiencing stress related to having insufficient time to spend with their own children; for caregiving for family and friends; or for recreational pursuits" (p. 7). In addition, women were more likely than men to feel torn between work and home responsibilities (CTF, 2014). Work-life balance is likely more stressful for women as women report having significantly more responsibilities of childcare (Duxbury & Higgens, 2013). Mäkelä, Hirvensalo, and Whipp, (2014) found that women reported that workload and stress as significantly more influential in their intention to leave the teaching profession when compared to their male colleagues.

The issue of gender and coping with stress is also unclear in the literature. For instance, Greenglass (1993) found that male and female government managers used social supports differently to construct stress coping strategies. Females used social support from their bosses to construct preventative and instrumental coping strategies, while males did not. For both men and women, however, friend and relative support contributed to the use of preventative coping strategies. Interestingly, in another study dealing specifically with teachers, Greenglass, Fiksenbaum, and Burke (1994) reported that support from friends and family had the same impact on work stress and burnout for both males and females. In our previous research (Ferguson et al., 2007), we found that gender was not a significant predictor of overall stress, nor did gender predict the perceived stigma of stress.

Methodology and Methods

This paper extends the data analysis previously reported by (Ferguson et al., 2007; Ferguson, Frost, & Hall, 2012). While we have explored the prevalence of stress, the factors that cause stress and the stigma of teacher stress (Ferguson et al., 2007) and which stress factors predict anxiety and depression (Ferguson, Frost, & Hall, 2012), we have not yet explored the relationship between teacher stress and social supports. Therefore, the instrument and data collection are the same as these prior studies but are reviewed here as well.

Instrument

Patterning the questionnaire on existing instruments and using response formats and instructions that have already been tested increases the validity and reliability of the questionnaire (Slavin, 1984). Data for this study were collected from a self-report questionnaire that was developed from reviewing the literature on teacher stress. The research of Kyriacou and Sutcliffe (1978), Fimian (1984), Borg and Riding (1991), Manthei and Gilmore (1996), and the British Columbia Teachers' Federation (cited in EdudataCanada, n.d.) were used to develop the questionnaire.

The questionnaire consisted of eight different sections related to teacher stress as well as a demographics section. The sections of the questionnaire that we use in this paper are as follows:

- Participants were asked to rate 46 teaching-related stress factors on a 5-point scale of *not at all stressful*, *mildly stressful*, *moderately stressful*, *very stressful*, and *extremely stressful*.
- Participants were asked to indicate how often they discussed stress with other teachers, their principals, their friends, their family, and their doctors on a five-point scale of *never*, *rarely*, *sometimes*, *often*, and *always*.

- Participants were asked if they believed there was a perceived stigma about teacher stress using a 5-point scale of *no stigma*, *mild stigma*, *moderate stigma*, *much stigma*, and *extreme stigma*.
- Participants were asked to indicate their job satisfaction using a 5-point scale of *very dissatisfied*, *somewhat dissatisfied, neither satisfied nor dissatisfied, fairly satisfied,* and *very satisfied.*
- Participants rated their career intent (how likely it is that they would be a teacher in 10 years time, provided that they were not within 10 years of retirement) and career commitment (how likely it is that they would choose teaching again as a career if they were to start their working life over again) using a 5-point scale of *very unlikely, somewhat unlikely, neither likely nor unlikely, fairly likely*, and *very likely.*
- Participants completed demographics questions, including gender, age, years of experience in teaching, grade level (elementary or secondary), and current teaching assignment.

The questionnaire was reliable with a Cronbach's alpha of .951, significantly above the generally accepted 0.7 cut-off (Kline, 2000).

Participants

Teachers enrolled in additional qualifications courses through Nipissing University were mailed a questionnaire. The sample for the study focused on teachers living in northern Ontario. To identify teachers in northern Ontario, participants with a postal code beginning with the letter "P" were mailed questionnaires. The "P" postal code region covers a large geographical area (from Honey Harbour in the south to northeastern Ontario to James Bay and the Quebec border in the north, and northwestern Ontario to Manitoba and the US border) and includes 25 school boards (including English public, English Catholic, French public, French Catholic) as well as band-controlled First Nations schools.

Of the 566 questionnaires that were mailed, 274 questionnaires were returned, resulting in a response rate of 48%. For the purpose of our research about social supports, 264 questionnaires were usable for the study. Teachers who completed the survey ranged in age from 25 to 64, with 220 (83.3%) identifying as female and 44 (16.7%) as male. Years of teaching experience ranged from newly hired teachers to veteran teachers with more than 30 years of experience in the classroom. The grade levels taught covered the range from Junior Kindergarten to the 12th Grade high school level, and while most respondents held permanent full-time appointments, 6 held permanent part-time positions, 24 worked full-time on a limited term contract, and 10 worked as occasional substitute teachers. Similar to representation in the Canadian school systems, a higher proportion of females than males taught at the lower grade levels (Statistics Canada, 2014). Males were more likely to have taught middle and upper grades.

Results

We used a Principal Components Analysis (PCA) to reduce the 46 stress factors into a smaller number of orthogonal components suitable for inclusion in a regression analysis. We used PCA because we make no assumptions about underlying factors causing stress outcomes or about the a priori interrelationships (if any) between the 46 stressors. Rather, we sought to condense the extensive list of stressors affecting teachers into a manageable and independent list

of factors. A preliminary PCA using all 46 sources of stress contained in the survey, revealed that nine of the 46 sources either cross-loaded onto multiple components or did not correlate with any components, a result similar to Ferguson, Frost, and Hall (2012). These nine factors were excluded from the subsequent principal components analysis reported in Appendix A (Table 1) as is common practice. From these 37 remaining stressors, we constructed five components using a PCA with varimax rotation. The five components correspond with individual sources of stress related to "Workload," "Student Behaviour," "Professional Relationships" with other teachers and administration, "Societal Attitudes" towards teachers, and "Employment Conditions".

In order to assess the relationship between sources of stress and social support networks, we used ordinal logistic regression to predict the regularity with which a teacher talked to each of the five social support groups about stress: family, friends, other teachers, their principal, and their doctor, because responses were measured under the ordered categories *never, rarely, sometimes, often,* and *always.* A teacher's gender; work experience, including years of service, grade level taught, and information regarding the teacher's appointment (full-time, part-time, permanent, contract, temporary, substitute); and beliefs about a stigma associated with experiencing stress as a teacher were included as factors, while the stress component scores were included as covariates. The results for the entire sample of teachers are reported in Appendix B: Table 2 while results for elementary school teachers are reported separately in Appendix C: Table 3. The threshold value at which a teacher is predicted to move from one response category to another is also reported for comparison purposes. For example, when assessing a teacher's frequency of stress discussion with family, if the teacher's overall predicted score was -1.7, the teacher would be above the threshold to talk rarely to family (-3.042) but below the threshold to talk sometimes (-1.228), so we would predict that the teacher would be most likely to talk rarely to their family about stress. If the overall score increased to 0.6 then the teacher would cross the threshold to talk sometimes to family about stress but would still be below the threshold to talk often (0.747) so we would predict that the teacher would talk sometimes to family about stress.

Research Question #1: Do certain stressors impact the frequency of utilization of social supports among teachers?

Overall, teachers who experienced increased workload stress were much more likely to talk to family, friends, and their fellow teachers; however, within the subsample of elementary teachers, the effect of workload stress on frequency of discussion with family and friends was positive but not statistically significant. Workload stress also contributed to an increased frequency of discussion about stress between elementary school teachers and their doctors. Stress from student behaviour, stress from professional relationships, stress from societal attitudes, and stress from employment conditions did not have a statistically significant effect on the frequency of discussion with friends or family. However, increased stress from societal attitudes towards teachers increased the likelihood of talking to other teachers about stress. In contrast, increased stress caused by professional relationships actually reduced the frequency of discussion with one's principal. While increased stress related to student behaviour did not impact the frequency of contact with family, friends, other teachers, or one's principal, it did increase the likelihood that a teacher would talk with his/her doctor about stress. Stress caused by employment conditions did not predict a teacher's frequency of talking to any of their friends, family, teachers, principals, or doctors.

Research Question #2: Does teacher gender or other demographic characteristics affect the frequency of utilization of use of social supports?

Males were much less likely than females to talk to their family, friends, and other teachers about stress. While the coefficients for talking to one's principal and talking to one's doctor are also negative, they are not statistically significant. Nevertheless, it is clear that males reported lower frequency of contacts with social supports when feeling stressed. None of the other demographic characteristics (age, years of experience in teaching, grade level -elementary or secondary- and current teaching assignment) impacted on the frequency of utilization of social supports.

Research Question #3: Does the perception of a stigma related to teacher stress affect the frequency of utilization of social supports?

Perceptions of stigma were a significant factor in predicting whether or not a teacher would talk to family or friends about stress. Those who believed that there was no stigma about teacher stress were used as a base reference group. Those who believed that there was extreme stigma were much less likely to talk to their family and friends about stress. Those who believed that there was mild stigma were also less likely to talk to their friends, and, among elementary teachers, those who believed there was mild stigma were also less likely to talk to their principals. Furthermore, those who believed that there was even mild stigma associated with stress were less likely to talk to fellow teachers relative to those who believed that there was no stigma.

Research Question #4: Does the frequency of utilization of social supports impact teacher job satisfaction, career intent, and career commitment?

In order to assess the relationship among the frequency of social support use and job satisfaction, career intent, and career commitment, we used an ordinal logistic regression to predict responses to each of the following questions: (a) in general, how satisfied are you with your job as a teacher? (b) in general, how likely is it that you will be a teacher in 10 years time? (only teachers who were more than 10 years from retirement were included in this analysis) and (c) in general, how likely is it that you would choose teaching again as a career if you were to start your working life over again? The results for the full sample are presented in Appendix D: Table 4 while results for elementary teachers are reported separately in Appendix E: Table 5.

Those who talked to their principal less often about stress demonstrated higher job satisfaction compared to those who always talked to their principal about stress. A lower frequency of contact with friends regarding stress also predicted much higher job satisfaction among all teachers; however, among the subsample of elementary teachers the results were not statistically significant. Talking with one's doctor also had a small positive impact on teachers' job satisfaction. A higher frequency of contact with friends about stress predicted lower career commitment among the teachers. Teachers who discussed stress with their friends more often also demonstrated a lower likelihood that they would choose teaching again as a career.

Discussion

The purpose of our research was to investigate the relationships among the frequency of utilization of social supports and stress factors, the stigma of teacher stress, job satisfaction, career intent, career commitment, and demographic characteristics. We found that teachers experiencing workload stress were more likely to talk to their friends, family, and fellow teachers. This finding is perhaps not surprising as teachers may not want to talk about workload stress with their principals, as principals may be the cause of some issues surrounding workload. In addition, teachers experiencing professional relationship stress were also less likely to discuss this stress with their principals. Similarly to workload stress, principals may be the cause of professional relationship stress and teachers may not feel comfortable discussing workload stress with them. The power imbalance between teachers and their principals is another possible reason for teachers not talking to their principals about stress. Teachers were also more likely to talk to other teachers about the stress resulting from societal attitudes towards teaching. This makes sense, as teachers can likely to relate to one another's work in ways that friends and family outside the profession may not. It is also possible that friends and family may share negative attitudes about teachers and the teaching profession, and teachers may not be comfortable talking about such attitudes with those who are not teachers themselves.

Our analysis also reveals that those teachers who felt that there is an extreme stigma of teacher stress were less likely to discuss stress with friends and family. Those teachers who felt a strong stigma surrounding teacher stress did not even feel comfortable talking with those close to them in their personal lives. Our findings are similar to Fimian's (1986), who found that during times of stress, teachers are more likely to receive support from colleagues than from administrators. The importance of a teacher's co-workers acting as a buffer to mediate burnout is discussed by Greenglass, Fiksenbaum, and Burke (1996) and Greenglass, Burke and Konarski (1997). Our research affirms that teachers utilize the support of their teaching colleagues with regard to stress from workload and stress from societal attitudes. Teachers tend to use the social supports within their teaching circle, and, like our finding with societal attitudes, it may be that teachers believe that only other teachers can relate to the stress that they experience in their jobs. Our study also indicates that talking to family and friends is related to workload stress among teachers, a finding that complements the work of Greenglass, Fiksenbaum, and Burke (1994) about friends and family being a predictor for teacher burnout.

Among all teachers, stress from student behaviours was the only stress factor linked to talking to their doctors about stress. Teachers do spend the majority of their time at work in the classroom and perhaps stress from student behaviors may be the most pressing for teachers. Among elementary teachers, however, increases in workload stress also increased frequency of discussion with one's doctor. Because of the negative effects of stress on one's health and on worker absenteeism (Naghieh, Montgomery, Bonell, Thompson, & Aber, 2015), it is concerning that teachers did not seem to utilize their doctors to cope with other sources of stress. Doctors may be able to help with a number of physical and emotional manifestations of stress, such as depression, anxiety, and difficulty sleeping (Duxbury & Higgens, 2013). Teachers may feel overwhelmed or feel lacking the time to meet with their primary health care provider, particularly considering the increased workload and issues of work-life balance presented in the literature (CTF, 2014; STF. 2013). It is also troubling that, even though student behaviour is a significant source of workload stress that predicts teacher anxiety and depression (Ferguson,

Frost, & Hall, 2012), teachers did not utilize the support within their schools to help ease the stress of student behaviour. Teachers could look to their colleagues, and perhaps more importantly to their administrators (who are in a better position to provide support), for help with student behavior. Alternatively, perhaps teachers feel that schools and teachers are being pushed to their limits –with a raise in workplace violence in schools (Gordon, 2017) and seemingly increasing student needs and teachers' feeling they cannot spend time with individual students (CTF, 2014) –the lack of discussion and seeking supports around stress may be an understandable phenomena. As the Saskatchewan Teachers' Federation (2014) found, a majority of teachers believe that stress was just a part of the job. Simply put, teachers may be doing everything they think they can about their stress. In addition, many ways of reducing teacher stress could be done at an organizational level, rather than the onus on individual teachers, which address stress symptoms rather than their cause (Naghieh, Montgomery, Bonell, Thompson, & Aber, 2015).

The relationship between principals and teacher stress is documented in the literature (Fimian, 1986; Russell, Altmaier, & Van Velzen, 1987). Teachers in our study, however, clearly did not use the social support from their colleagues nor from their principal to help ease the stress of student behaviours. It is possible that perhaps those teachers who do not talk about stress are able to manage their stress levels at the personal level (Pearlin & Schooler, 1978). It is also possible that perceived or real stigma of teacher stress could be preventing these conversations about stress from occurring. Teachers may feel judged or inadequate in their roles if they admit to feeling stressed at work to their principals, who are generally teachers' immediate supervisors. In addition because the sample for the study was teachers enrolled in AQ courses, it is possible that teachers may not want to talk to their principals about stress if they had previously consulted with principals about taking an AQ course. Sass, Seal, and Martin (2011) suggested that support from teachers and principals are interrelated, in that support from colleagues would "do little good" if teachers were not supported by principals (p. 211). Again, a perception of a stigma surrounding teacher stress may also explain why teachers might be reluctant to talk to colleagues about stress. We found that those teachers who believed that there is a mild stigma surrounding teacher stress were less likely to talk to fellow teachers about stress. Younghusband, Garlie, and Church (2003) proposed that teachers may not want to discuss stress with administrators as teachers may be perceived as weak or as failures as teachers.

Like Greenglass (1993), we found males and females used social supports differently. Regardless of grade level taught (i.e. elementary or secondary), males in our study are less likely than females to talk to their family, friends, and other teachers about stress. As teacher stress levels vary between men and women (CTF, 2014; Duxbury & Higgens, 2013), it is plausible that men cope with work stress in different ways from women. We found no significant relationship between gender and talking with one's principal or doctor about stress.

We found that there was higher job satisfaction among those teachers who spoke to their principals and their friends about stress less frequently. Our results also indicate that there was a negative relationship between those teachers who spoke to their friends frequently about stress and teachers' career intent (be a teacher in 10 years time) and career commitment. The findings that teachers who spoke to principals and friends less frequently about stress but had high job satisfaction, and that teachers who frequently talked to their friends about stress but had a lower sense of career intent and career commitment, might be explained by the postulation that those who solve their own problems are more efficacious than those who turn to others for advice and support (Mirowsky & Ross, 2003; Pearlin & Schooler, 1978). In addition, speaking to others

about stress at work could be a sign or an indicator that teachers are quite unhappy with their work and are having difficulty coping. Perhaps those teachers who are able to cope with stress without utilizing social supports have higher job satisfaction and are more committed to the profession. However, opposing this hypothesis, we did find that there was a small positive relationship between teachers speaking to their doctors often about stress and job satisfaction.

Limitations

Our study is limited in that it was a one-time self-report on teacher stress and the frequency of utilization of social supports. As teachers' jobs can change significantly throughout the year and from year to year, surveying teachers at another date could produce different results. The surveys were mailed to teachers in the middle of the fall term and it is possible that teachers might experience higher levels of stress at other times, such as end of term when report cards are due. While men do constitute a smaller population of elementary school teachers in Ontario, men were underrepresented in the study (only 17.6% were male). Secondary school teachers were also underrepresented in the study (only 16.1% were secondary school teachers). It is plausible that, because the job conditions are different between the two levels of schooling, teacher stressors at the high school level could be different from those at the elementary level. We have reported results for elementary school teachers separately, and in many cases the magnitude of the coefficients are similar to those of the entire sample. In several instances they do differ suggesting that there are some differences between elementary school teachers and other teachers; however, due to the limited sample size it was not possible to explore these differences further. The limited sample size also likely contributed to the dearth of statistically significant coefficients in the elementary school teacher subsample compared to the full sample.

Another limitation of the study is that the sample was teachers enrolled in an additional qualification course at Nipissing University. It is possible that teachers experiencing high amounts of stress may be too overwhelmed to be enrolled in a course and thus the sample may underreport the true extent of stress among the population of teachers. It is also possible, however, that participants may be more stressed because of taking a course in addition to their regular teaching jobs. Teachers' reasons and motivations for taking AQ courses could also impact stress levels and different AQ courses could also have different workloads and therefore different stress for teachers taking courses.

Suggestions for Future Research

Because a one-time questionnaire research design captures a snapshot in time of teachers' stress levels, longitudinal studies that explore the impact of social supports on teacher stress over time, like the work of Greenglass, Fiksenbaum, and Burke (1994), are needed. Teachers' job situations, and therefore their stress levels, can vary as teaching assignments, administrators, and students change. These changes may impact teachers' usage of various social supports. The link between teacher gender and usage of social supports is also an area that warrants further research. Our research found a difference between males and females and their frequency of utilization of social supports to cope with stress while other research has not found a difference among gender, social supports, and burnout (Greenglass, Fiksenbaum, & Burke, 1994). In addition, our study found that those teachers who spoke to colleagues and principals less frequently about stress had higher levels of job satisfaction. Studying how these individuals

cope with stress without seeking social support could assist other teachers with providing alternative strategies to deal with work stress. Finally, in our digital age, the possibility of online networks and social media could be another form of social support for teachers. Leung, Chiang, Chui, Lee, and Mak's (2011) study demonstrates the potential of using online forums as a means of social support to reduce teacher stress. The ability to be anonymous in online environments poses an opportunity for teachers to discuss stress without the perceptions of stigma from colleagues and administrators and is an area worthy of more research.

Implications for Practice

Our study reveals that for teachers in northern Ontario, stress is a significant concern. While teachers may feel overwhelmed with work/life balance and workload demands (Duxbury & Higgens, 2013), and stress can be very personal and vary from person to person, teachers need to make self-care a priority. For some teachers that may mean using personal stress coping strategies such as mindfulness, exercise, etc., while for others reaching out to friends, family, colleagues, administrators, and their health care providers is necessary and essential. Teachers, however, need to feel safe in talking about stress without fear of stigma, whether perceived or real.

While teachers can take some measures to cope with the symptoms of stress, organization structures (school boards and Ministries of Education) are an avenue to better deal with the causes of teacher stress (Naghieh, Montgomery, Bonell, Thompson, & Aber, 2015). While further research about organizational changes and teacher stress are needed, some studies have reported social supports such as coaching and mentoring at the organizational level as holding promise in reducing teacher stress (Naghieh, Montgomery, Bonell, Thompson, & Aber, 2015). At the school level, administrators could provide supports to teachers to reduce stress, particularly with regard to student behaviours, and also work to create an open climate in their schools to acknowledge and discuss teacher stress, as the stigma of teacher stress appears to be a prevailing problem within the teaching profession. Faculties of education can also play a role in teacher stress and wellbeing. Harris (2012), for example, calls for teacher stress management to be a part of formal teacher training in Canada, integrated within pre-service teacher education as well as additional qualification courses. While stress and its manifestations can vary person to person and a course would likely focus on individual teachers' stress rather than organizational changes, courses could include topics such as time management and work/life balance, and students could also discuss stress they experience on practicum. Addressing stress during pre-service education could help alleviate some of the stigma of discussing stress in their future careers.

Conclusions

Our study explored how the frequency of utilization of social supports is related to teacher stress factors, job satisfaction, career intent, career commitment, the perception of a stigma attached to teacher stress, and teacher demographics. Our results show that teachers seldom spoke to their health care providers about and instead utilized family, friends, fellow teachers, and sometimes their principals. Teachers, however, were clearly not always comfortable talking about all stressors with their principals, particularly stress from professional relationships. Males in our study were less likely to talk to their various social supports about stress. There appears to

be a stigma of teacher stress, as those teachers who felt that there was a mild stigma of teacher stress were less likely to talk to their colleagues about stress. As one teacher said in the open comments section of the survey, "The greatest amount of stigma comes from other teachers. Often when teachers express stress, comments are made such as 'If you can't handle it, leave.' There is not a lot of support within the profession."

We also found that there was a higher level of job satisfaction among teachers who spoke with friends and principals less frequently about stress. In addition, we report that those teachers who frequently talked to their friends about stress have a lower sense of career intent and career commitment. These two results may indicate that teachers with high job satisfaction, career intent, and career commitment likely utilized other stress coping mechanisms other than socials supports. Our findings may also indicate that utilizing social supports may not be enough to combat stress and have an impact on job satisfaction, career intent, and career commitment. As one teacher indicated on the survey, "I feel fortunate because I have a very supportive staff. We share many of our daily challenges. Despite this, I often feel like I am fighting a losing battle."

The results of our study and the extant literature point to teacher stress having a ripple effect, impacting many other aspects of teacher mental health including burnout (Coulter & Abbey, 2009), absenteeism (Duxbury & Higgens, 2013), using employee benefits (Duxbury & Higgens, 2013) and taking leaves of absence (Naylor & White, 2010), absenteeism (Duxbury & Higgens, 2013) job satisfaction, intent to stay in the profession (Duxbury & Higgens, 2013; Ferguson, Frost, & Hall, 2012), and teacher attrition (Clark & Antonelli, 2009; McIntyre, 2006). School boards, teachers' unions, and faculties of education need to make workplace health a priority as the impact of employee mental health can be profound (Baumann & Muijen, 2010). We encourage other researchers to continue to monitor and report on teacher stress, coping strategies, and organizational changes in education that promote workplace wellbeing.

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Appendix A: Table 1

Principal Component Analysis Loadings for Sources of Teacher Stress

	Component 1: Workload	Component 2: Student Behaviour	Component 3: Professional Relationships	Component 4: Societal Attitude	Component 5: Employment Conditions
Too much work to do	.857				
Not enough time to do the work	.847				
Lack of time for marking	.796				
Inadequate preparation time	.750				
Balancing home and school responsibilities	.732				
Increase in workload	.732				
Administrative paperwork	.601				
Lack of time to assist individual students	.584				
Taking courses while working full time	.574				
Completing report cards	.496				
Class size	.495				
Split grade classrooms	.416				
Shortages of materials	.413				
Being accountable for student achievement	.391				
Extra-curricular responsibilities	.352				
Completing IEPs	.270				
Changes in the curriculum	.229				
Poorly motivated students		.830			
Students' attitudes towards work		.730			
Mixed ability of students in classroom		.661			
Individual students who continually misbehave		.594			
Impolite and disruptive behaviour of students in general		.561			
Students with difficulties at home		.249			
Relationship with principal or vice principal			.855		
Attitudes and behaviour of the principal			.846		
Lack of communication with administration			.832		
Lack of participation in decision-making			.564		
Relationships with other teachers			.238		
Relationships with support staff			.156		
Undeserved criticism of teachers and schools				.711	
Lack of recognition for the contributions of teachers				.694	
Lack of respect in society for schools and teachers				.677	
Dealing with parents				.247	
Poor opportunities for promotion					.729
Inadequate salary					.676

Job security	.581
Lack of training and professional development	.510

Appendix B: Table 2

Ordinal Logistic Regression Coefficient Estimates of Effect of Stress Factors on Frequency of Social Contact, Full Sample (Standard Errors in Brackets)

	Family	Friends	Other Teachers	Principal	Doctor
Workload Stress	0.424***	0.335***	0.459***	0.187	0.195
	(0.130)	(0.130)	(0.131)	(0.127)	(0.132)
Student Behaviour Stress	0.196	0.034	0.182	0.069	0.336***
	(0.125)	(0.122)	(0.125)	(0.131)	(0.130)
Professional Relationship Stress	0.037	0.111	-0.079	-0.423***	0.101
	(0.119)	(0.119)	(0.123)	(0.130)	(0.127)
Societal Attitude Stress	0.134	0.156	0.248**	0.106	0.019
	(0.125)	(0.124)	(0.125)	(0.124)	(0.129)
Employment Conditions Stress	0.131	0.167	-0.109	-0.058	0.083
	(0.130)	(0.132)	(0.131)	(0.134)	(0.139)
Female[a]	--	--	--	--	--
Male	-1.516**	-1.838***	-1.237***	-0.484	-0.407
	(0.342)	(0.340)	(0.340)	(0.335)	(0.350)
No Stigma[a]	--	--	--	--	--
Mild Stigma	-0.222	-0.823*	-0.768*	-0.191	0.051
	(0.423)	(0.425)	(0.445)	(0.433)	(0.463)
Moderate Stigma	-0.010	-0.067	-0.080	-0.093	-0.386
	(0.387)	(0.392)	(0.414)	(0.395)	(0.433)
Much Stigma	0.297	-0.284	0.453	0.192	0.420
	(0.421)	(0.428)	(0.454)	(0.444)	(0.456)
Extreme Stigma	-1.860**	-1.853**	0.183	-0.270	-0.113
	(0.830)	(0.837)	(0.872)	(0.836)	(0.808)
Teaching Experience	Included	Included	Included	Included	Included
Grade Level Taught	Included	Included	Included	Included	Included
Type of Teaching Appointment	Included	Included	Included	Included	Included
Frequency of discussion about stress: Threshold value to enter category					
Talked Always	2.823	1.639	2.319	5.829	4.868
	(0.584)	(0.515)	(0.545)	(1.110)	(0.866)
Talked Often	0.747	-0.577	-0.111	3.556	2.761
	(0.561)	(0.480)	(0.506)	(0.588)	(0.566)
Talked Sometimes	-1.228	-2.674	-2.533	0.815	1.305
	(0.564)	(0.512)	(0.540)	(0.491)	(0.524)
Talked Rarely	-3.042	-4.796	-4.419	-0.934	-0.439
	(0.619)	(0.587)	(0.615)	(0.492)	(0.514)
Talked Never	--	--	--	--	--
Number of Observations	264	264	264	264	263
Pseudo R^2	0.112	0.116	0.126	0.077	0.056

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

[a] Included as Base Reference group

Appendix C: Table 3

Ordinal Logistic Regression Coefficient Estimates of Effect of Stress Factors on Frequency of Social Contact, Elementary School Teachers (Standard Errors in Brackets)

	Family	Friends	Other Teachers	Principal	Doctor
Workload Stress	0.282	0.253	0.331*	-0.091	0.559***
	(0.189)	(0.187)	(0.183)	(0.175)	(0.204)
Student Behaviour Stress	0.132	-0.113	0.119	0.198	0.385**
	(0.167)	(0.167)	(0.171)	(0.174)	(0.181)
Professional Relationship Stress	-0.054	-0.061	0.084	-0.480***	0.111
	(0.163)	(0.164)	(0.164)	(0.169)	(0.177)
Societal Attitude Stress	0.196	0.114	0.264	0.017	-0.043
	(0.158)	(0.159)	(0.162)	(0.158)	(0.181)
Employment Conditions Stress	-0.069	0.151	-0.139	-0.201	0.301
	(0.167)	(0.168)	(0.170)	(0.177)	(0.184)
Female[a]	--	--	--	--	--
Male	-1.714***	-2.314***	-2.158***	-0.405	-0.333
	(0.475)	(0.480)	(0.503)	(0.463)	(0.504)
No Stigma[a]	--	--	--	--	--
Mild Stigma	-0.392	-0.765	-1.115*	-1.211**	-0.133
	(0.578)	(0.574)	(0.612)	(0.602)	(0.634)
Moderate Stigma	-0.076	0.141	-0.035	-0.734	-0.835
	(0.511)	(0.522)	(0.544)	(0.536)	(0.563)
Much Stigma	0.007	-0.025	0.128	-0.551	0.060
	(0.556)	(0.558)	(0.594)	(0.587)	(0.595)
Extreme Stigma	-1.893*	-0.696	0.584	-1.022	-0.349
	(1.099)	(1.260)	(1.194)	(1.325)	(1.081)
Teaching Experience	Included	Included	Included	Included	Included
Type of Teaching Appointment	Included	Included	Included	Included	Included
Frequency of discussions about stress: Threshold value to enter category					
Talked Always	0.958	1.953	1.739	--	4.948
	(0.546)	(0.608)	(0.602)		(1.156)
Talked Often	-1.045	-0.289	-0.668	2.708	2.731
	(0.543)	(0.548)	(0.578)	(0.663)	(0.681)
Talked Sometimes	-2.828	-2.409	-3.247	-0.040	1.465
	(0.591)	(0.590)	(0.657)	(0.569)	(0.620)
Talked Rarely	-5.045	-4.340	-4.851	-1.819	-0.534
	(0.815)	(0.699)	(0.780)	(0.585)	(0.602)
Talked Never	--	--	--	--	--
Number of Observations	147	147	147	147	147
Pseudo R^2	0.080	0.119	0.115	0.057	0.086

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

[a] Included as Base Reference group

Appendix D: Table 4

Ordinal Logistic Regression Coefficient Estimates of the Relationship between Social Contact and Job Satisfaction and Career Commitment, Full Sample (Standard Errors in Brackets)

	Job Satisfaction	10 Year Commitment	Choose Teaching Again
Workload Stress	-0.319**	-0.077	-0.306**
	(0.153)	(0.168)	(0.142)
Student Behaviour Stress	-0.454***	-0.194	-0.341***
	(0.144)	(0.153)	(0.128)
Professional Relationship Stress	-0.389***	-0.025	-0.228*
	(0.145)	(0.156)	(0.129)
Societal Attitudes Stress	0.053	-0.095	-0.160
	(0.144)	(0.149)	(0.130)
Employment Conditions Stress	-0.163	-0.331**	-0.304**
	(0.151)	(0.156)	(0.136)
Frequency of Discussions about Stress with:			
Family Never[a]	--	--	--
Family Rarely	-0.733	-0.647	-0.363
	(0.860)	(1.047)	(0.813)
Family Sometimes	-0.821	-1.029	-0.533
	(0.811)	(1.004)	(0.771)
Family Often	-1.270	-0.544	-0.761
	(0.835)	(1.019)	(0.783)
Family Always	-1.076	0.917	-0.041
	(0.936)	(1.183)	(0.885)
Friends Never[a]	--	--	--
Friends Rarely	-1.301*	-0.627	-1.352**
	(0.701)	(0.885)	(0.679)
Friends Sometimes	-1.411*	-1.343	-1.612**
	(0.739)	(0.913)	(0.713)
Friends Often	-1.895**	-1.674*	-2.110***
	(0.771)	(0.918)	(0.730)
Friends Always	-2.130**	-2.593**	-3.086***
	(1.052)	(1.187)	(0.961)
Teachers Never[a]	--	--	--
Teachers Rarely	0.448	-0.660	0.320
	(0.801)	(0.970)	(0.728)
Teachers Sometimes	-0.333	-0.111	0.454
	(0.814)	(0.938)	(0.721)
Teachers Often	0.106	-0.599	0.418
	(0.831)	(0.954)	(0.744)
Teachers Always	0.874	-0.069	0.647
	(0.960)	(1.059)	(0.860)
Principal Never[a]	--	--	--
Principal Rarely	0.251	0.226	-0.055
	(0.353)	(0.390)	(0.323)
Principal Sometimes	0.281	-0.448	0.222
	(0.405)	(0.433)	(0.372)

Principal Often	-.013	-0.374	0.247
	(0.824)	(0.854)	(0.744)
Principal Always	-5.638***	-2.561	--
	(1.908)	(1.972)	
Doctor Never[a]	--	--	--
Doctor Rarely	0.043	0.527	-0.057
	(0.321)	(0.351)	(0.298)
Doctor Sometimes	-0.142	-0.496	0.062
	(0.438)	(0.493)	(0.397)
Doctor Often	1.177*	1.073	0.417
	(0.697)	(0.766)	(0.645)
Doctor Always	0.183	0.916	1.014
	(1.545)	(1.810)	(1.511)
Gender and Work Experience	Included	Included	Included
Type of Teaching Appointment	Included	Included	Included
Beliefs about Stigma	Included	Included	Included
Threshold value to enter category			
Very dissatisfied	--		
Somewhat dissatisfied	-6.022		
	(1.189)		
Neither satisfied nor dissatisfied	-4.154		
	(1.116)		
Fairly satisfied	-3.381		
	(1.107)		
Very satisfied	-0.231		
	(1.089)		
Very unlikely		--	--
Somewhat unlikely		-6.098	-4.761
		(1.436)	(1.079)
Neither likely nor unlikely		-4.915	-3.454
		(1.410)	(1.064)
Fairly likely		-4.272	-2.802
		(1.403)	(1.059)
Very likely		-2.339	-1.311
		(1.385)	(1.047)
Number of Observations	263	231	262
Pseudo R^2	0.136	0.132	0.084

Appendix E: Table 5

Ordinal Logistic Regression Coefficient Estimates of the Relationship between Social Contact and Job Satisfaction and Career Commitment, Elementary School Teachers (Standard Errors in Brackets)

	Job Satisfaction	10 Year Commitment	Choose Teaching Again
Workload Stress	-0.404	-0.075	-0.494**
	(0.247)	(0.257)	(0.229)
Student Behaviour Stress	-0.702***	-0.595**	-0.396**
	(0.216)	(0.234)	(0.190)
Professional Relationship Stress	-0.565***	-0.058	-0.274
	(0.213)	(0.226)	(0.196)
Societal Attitudes Stress	0.150	-0.173	0.005
	(0.203)	(0.212)	(0.181)
Employment Conditions Stress	-0.168	-0.418*	-0.511**
	(0.213)	(0.239)	(0.207)
Frequency of Discussions about Stress with:			
Family Never[a]	--	--	--
Family Rarely	0.465	-0.673	1.885
	(1.700)	(2.172)	(1.486)
Family Sometimes	-0.139	-1.181	1.400
	(1.698)	(2.138)	(1.496)
Family Often	-0.646	-1.281	0.282
	(1.652)	(2.120)	(1.430)
Family Always	-0.008	0.008	1.454
	(1.757)	(2.238)	(1.547)
Friends Never[a]	--	--	--
Friends Rarely	-0.879	-0.780	0.322
	(1.112)	(1.395)	(1.149)
Friends Sometimes	-0.955	-0.289	0.124
	(1.230)	(1.514)	(1.309)
Friends Often	-1.188	-0.421	0.445
	(1.242)	(1.473)	(1.278)
Friends Always	-2.420	-0.709	-1.949
	(1.570)	(1.839)	(1.607)
Teachers Never[a]	--	--	--
Teachers Rarely	-1.833	-0.783	-2.473
	(1.543)	(2.290)	(1.662)
Teachers Sometimes	-2.233	-1.842	-2.277
	(1.625)	(2.366)	(1.822)
Teachers Often	-1.873	-2.415	-2.363
	(1.643)	(2.420)	(1.860)
Teachers Always	-1.430	-2.271	-2.342
	(1.826)	(2.541)	(1.988)
Principal Never[a]	--	--	--
Principal Rarely	0.742	0.655	-0.377
	(0.536)	(0.573)	(0.500)
Principal Sometimes	0.535	-0.023	0.593
	(0.587)	(0.618)	(0.560)

Principal Often	1.055 (1.098)	-0.276 (1.120)	-0.772 (1.048)
Doctor Never[a]	--	--	--
Doctor Rarely	0.091 (0.458)	0.273 (0.494)	-0.179 (0.438)
Doctor Sometimes	0.656 (0.706)	0.193 (0.758)	0.302 (0.649)
Doctor Often	0.535 (1.008)	1.901 (1.202)	1.100 (0.981)
Doctor Always	13.924 (789.145)	--	14.343 (668.589)
Gender and Work Experience	Included	Included	Included
Type of Teaching Appointment	Included	Included	Included
Beliefs about Stigma	Included	Included	Included
Threshold value to enter category			
Very dissatisfied	--		
Somewhat dissatisfied	-7.610 (2.278)		
Neither satisfied nor dissatisfied	-5.318 (2.183)		
Fairly satisfied	-4.611 (2.175)		
Very satisfied	-1.439 (2.147)		
Very unlikely		--	--
Somewhat unlikely		-8.402 (3.093)	-4.939 (2.117)
Neither likely nor unlikely		-6.151 (2.921)	-3.630 (2.103)
Fairly likely		-5.500 (2.908)	-2.816 (2.095)
Very likely		-3.112 (2.878)	-0.890 (2.082)
Number of Observations	147	137	147
Pseudo R^2	0.154	0.197	0.158