

An Empirical Review of the Mental Health and Well-being of Online Instructors

ERICA MAKARENKO

JAC J.W. ANDREWS

University of Calgary

ABSTRACT: This current review examined the findings from the empirical literature relative to the mental health and well-being of distance learning instructors and the social-emotional influences and effects of online instruction with attention to associated gender differences. A systematic literature review was conducted; as a result, it appears that there is a paucity of research related to the mental health and well-being of online instructors in higher education settings. Of this limited research, results indicate that online instructors are more susceptible to experiences of isolation and emotional distress than face-to-face instructors and that female instructors tend to fare worse in terms of experiencing emotional distress than their male counterparts. However, there are mixed findings with respect to these results. Continued research in this area is warranted due to the limited number of studies and mixed findings in this area especially due to the growing rate of online course delivery in higher education. The implications from the research findings and some future research directions are discussed.

Keywords: online instruction, instructor burnout, instructor stress, higher education, gender

RESUMÉ: Nous avons examiné les conclusions de la littérature empirique en ce qui concerne la santé mentale et le bien-être des instructeurs d'enseignement à distance, et les influences et effets socio-émotionnels de l'enseignement en ligne avec une attention particulière sur les différences associées au sexospécificité. Comme résultat d'une analyse bibliographique, nous avons conclu qu'il y a un manque de recherche lié à la santé mentale et au bien-être des instructeurs en ligne au niveau supérieur. Les résultats de cette recherche limitée indiquent que les instructeurs en ligne sont plus susceptibles aux expériences d'isolement et de détresse émotionnelle que les instructeurs qui enseignent face-à-face et que les instructrices souffrent plus de détresse émotionnelle que leurs collègues masculins. Tout de même, des constatations mitigées proviennent de ces résultats. Plus de recherche dans ce

domaine est indispensable en raison du nombre limité d'études et des constatations mixtes, pour répondre au taux croissant de cours offerts en ligne dans le cadre de l'éducation supérieure. Nous concluons avec une discussion sur les implications et des directions pour la recherche dans l'avenir.

Mots-clés : l'enseignement en ligne, l'épuisement des instructeurs, le stress des instructeurs, l'enseignement au niveau supérieur, le sexospécificité

Distance education and online learning have grown in popularity with the development of technology platforms and programs to support it as well as because of their appeal for both students and instructors (Allen & Seaman, 2007). Research has demonstrated that many online instructors and students are drawn to the flexibility of online course delivery (Li & Akins, 2005) as well as to the autonomy and self-determination that accompany this flexibility (Appana, 2008; Taylor, 2002). In 2015, *Global Affairs Canada* commissioned a study on distance and online learning in Canada (Martel, 2015). In this study, 93% of the Canadian higher education institutions surveyed offered online courses, and 29% of all Canadian university students were registered in online courses (Martel, 2015).

With the availability of online course delivery, online learning has emerged as a means to broaden and facilitate ongoing professional development and lifelong learning (McCann & Holt, 2009). There are benefits to online course delivery and participation, both for instructors and students (Li & Irby, 2008). For example, mature students with families and full-time employment can readily return to higher education due to the flexibility and self-directed nature of this delivery system (Yamagata-Lynch, 2014). However, online instruction presents a different set of challenges for online instructors compared to on-campus instructors. Online instructors experience more stress with respect to learning new tools and techniques (McCann & Holt, 2009), face pressures related to making online courses equivalent to on-campus courses (Stern, 2004), and deal with tension related to students' expectations relative to instructional pace and synchronous online interactions (Plat, Raile, & Yu, 2014).

Moreover, research also suggests that the well-being and mental health of online instructors may be a significant cause for concern, with studies finding increased rates of burnout (Hogan & McKnight, 2007), isolation and loneliness (Dolan, 2011), and

emotional distress (Smith, Brashen, Minor, & Anthony, 2015) amongst higher education online instructors when compared to their face-to-face counterparts, particularly that of female online instructors (Hogan & McKnight, 2007). As such, it appears that online instructors face a higher rate of burnout compared to their on-campus counterparts, as well as possible increased instances of emotional distress, namely isolation, loneliness, and dissatisfaction, when compared to the experiences of traditional, classroom-based instructors. It also appears that there might be gender differences relative to online instructional experiences. The purpose of this review was to investigate and analyze the empirically-based findings with respect to the social-emotional experiences of instructors related to online course instruction as well as present practical recommendations and future research directions with respect to these issues.

Method

A systematic literature search was conducted using several electronic databases including PsycINFO, PubMed, JSTOR, and EBSCO, which were available to the researchers through their university library. Several articles were also discovered by using the Scholar.Google.com search engine. The search terms used included: online instruction + stress, online instruction + burnout, online instruction + emotional distress, online instruction + mental health, and online instruction + gender. The articles were then reviewed and reduced by way of inclusion criteria relative to our focus. Included articles must be published in the year 2000 or later due to the increasing emergence of distance education within this time period. Moreover, included articles needed to: (a) be peer reviewed; (b) be published in English; (c) empirically address social-emotional factors (e.g., stress/burnout) related to online instruction; and (d) include one of the following in the title: *online instruction*, *online teaching*, or *online instructor(s)*. Studies were excluded if they did not provide the full text and/or pdf available online, if they provided inadequate information about study design and data analyses and findings, or if they only provided general information and/or a description of online instruction. After all inclusion and exclusionary criteria were implemented, five articles met all criteria and were included in this review (see Table 1). The results of this review are presented in the following sections with respect to the empirical findings relative to online instruction and burnout, stress, and emotional well-being with regard to online instruction, and online instruction and gender differences followed

by a discussion of the overall findings and implications of the review.

Results

Table 1 provides an overview of the five articles discussed within the results section. As mentioned above, once the inclusion criteria were applied, only five studies remained which met all criteria for in-depth review and analysis.

Table 1. Articles Reviewed and Associated Main Content

Author(s) and Year	Main Content of Article
Hogan and McKnight, 2007	Increased levels of instructor burnout in online instruction; lower levels of personal satisfaction in online instruction; greater levels of emotional distress in female online instructors compared to males.
McCann and Holt, 2009	No difference between on-campus and online instructors in terms of burnout, depersonalization, or gender differences in online course instruction.
Smith, Brashen, Minor, and Anthony, 2015	Over 85% of respondents (online instructors) reported moderate to high levels of stress, which negatively affected work performance, emotional well-being, and sleep patterns.
Dolan, 2011	Online instructors reported lack of connection to their institution, poor communication, feelings of isolation and loneliness, and overall lack of support.
Welter, 2008	Online instructors and on-campus reported similar levels of stress with regard to their roles and responsibilities, boundaries, and demands of the environment; gender was not found to be a significant variable in the experience of stress.

Online Instruction and Burnout

The issue of burnout has been identified as a significant factor influencing the turnover rate across professions (attrition; Hill, 2004) and overall job satisfaction (Sangganjanavanich & Balkin, 2013) of instructors in higher education. However, despite this fact, there have been few studies examining the rate and

likelihood of burnout of online instructors in higher education. In 2007, Hogan and McKnight explored the issue of burnout among online instructors in the United States. In their study, Hogan and McKnight (2007) acknowledged this lack of research and designed a study using the Maslach's Burnout Inventory Educator Survey (MBI-ES; Maslach, Jackson, & Leiter, 1996) to assess burnout among 76 University instructors who taught in online formats. The MBI-ES has been widely accepted among researchers and addresses the three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment (Maslach, Jackson, & Leiter, 1996). Hogan and McKnight (2007) found that instructor depersonalization was common in online instruction ($M = 9.81$, $SD = 4.68$) along with lower levels of personal satisfaction compared to on-campus instructors ($M = 46.91$, $SD = 6.62$). These researchers went on to offer recommendations from Kyriacou (2001, as cited in Wood & McCarthy, 2004) for online instructors to avoid the experience of burnout when teaching in online settings. In this regard, their recommendations included suggestions for institutions to consult with online instructors with respect to matters that impact their learning environments, provide adequate instructional support, facilitate professional development, and reduce the teaching load and the number of students per online course. Moreover, the authors recommended that further research investigate differences among higher education online instructors within and across various disciplines.

In addition to the previously mentioned study by Hogan and McKnight (2007), another pair of researchers (McCann & Holt, 2009) sought to examine the rates of burnout experienced by online higher education instructors. In their study, McCann and Holt also used the MBI-ES (Maslach, Jackson, & Leiter, 1996) to survey online instructors in order to obtain information with regard to emotional exhaustion, depersonalization, personal accomplishment, and gender. However, contrary to the Hogan and McKnight (2007) study, McCann and Holt (2009) did not find evidence to support increased rates in any of these areas with respect to online instructors when compared to brick and mortar instructors. The explanation that accompanied McCann and Holt's findings was that time had played a significant factor and that online instructors were becoming more familiar with online instructional technologies and confident in their capacity to instruct courses in an online format; as such, these researchers suggested that online instructors are becoming more adept in their ability to manage expectations and technology in a way that does not lead to premature burnout, stress, or increased emotional distress.

compared to on campus instructors (McCann & Holt, 2009). These mixed findings suggest that online instructors are likely experiencing both positive and negative feelings depending on the time spent teaching in online environments, ease in the use of new tools and techniques, and level comfort with online instruction. Hence, as McCann and Holt (2009) further suggested, as distance learning continues to evolve, so too will instructors' satisfaction and mood associated with online learning.

Online Instruction, Stress, and Emotional Well-being

Online instructors have reported feeling increased levels of overall stress and emotional distress compared to on-campus instructors. A study conducted by Smith, Brashen, Minor, and Anthony in 2015 examined the levels of stress experienced by higher education online instructors and how this reported stress impacted overall well-being and productivity. Using a demographic survey, Smith and colleagues (2015) surveyed 100 online instructors and found that the overall stress level for online faculty was reflected by 67.6% of respondents reporting a high or very high level of stress while 17.1% stated that they experienced a moderate level of stress. Of the factors that may have impacted reported levels of stress, the most significant stressors noted by participants included time constraints, technological issues, and large class sizes (Smith et al., 2015). Additionally, respondents in this study reported that this increased level of stress negatively impacted their work performance (i.e., productivity meeting deadlines), with 55% of individuals reporting that this stress affected their job performance *very much* (Smith et al., 2015).

In addition to the issues associated with work performance, Smith and colleagues (2015) found that a large portion of participants (45%) reported that sleep disturbances occurred because of their heightened stress. Additionally, 40% of participants reported extreme impatience; 34% said they experienced increased levels of irritability; 32% reported feeling overwhelmed regularly; and 20–30% of the participants indicated that their work quality decreased and that they experienced feelings of resentfulness, anger, anxiousness, and engaged in wasted activities (Smith et al., 2015). These findings suggest that online instructors may be more prone to stress due to a combination of factors that impact online course delivery, and that this experience of stress affects both work performance and emotional well-being. One possible implication of these findings is that if these issues continue without being satisfactorily addressed, online instructors may not continue with online instruction.

Similar to Smith and colleagues' research, Welter (2008) examined the differences in the experience of stress between traditional on-campus instructors and online instructors in higher education. Welter conducted his research with 160 higher education instructors who had experience teaching either online or on-campus courses. Two instruments and a brief demographic questionnaire were used in Welter's study. The first instrument, the Problem-Focused Style of Coping (PF-SOC; Heppner, Cook, Wright, & Johnson, 1995), was used to measure coping styles of the participants. The second instrument, the Occupational Stress Inventory-Revised (OSI-R; Osipow, 1998), was used to measure the stress levels of the instructors in the study.

In his study, Welter (2008) found that there were no significant differences between the two groups of instructors in terms of levels of stress related to roles or responsibilities, instructional styles, boundary issues, or preferred methods of coping with issues of distress. One of the explanations that Welter offers with regard to the findings is that the on-campus instructors ($M = 8.67$, $SD = 8.28$) had slightly longer teaching careers reported in years compared to the online instructors ($M = 7.55$, $SD = 8.24$); however, the online instructor group taught significantly more courses than the on-campus instructor group ($M = 8.34$ courses per year vs. 6.37 courses per year). As such, it may be that instructors who have longer careers and teach a substantial number of courses per year may become accustomed to the demands of online instruction over time and do not report higher levels of stress due to this acclimatization to the online setting for instructional delivery.

In addition to reporting increased stress in Smith et al.'s (2015) study, online instructors have also reported the experience of isolation and feelings of loneliness that could be impacting overall performance and well-being. In 2011, Dolan conducted a study of the experiences of adjunct online instructors' experiences with teaching distance courses. Using a qualitative approach, Dolan conducted interviews with 28 adjunct online instructors working across North America for one online higher education institution. In addition to using structured questions for each participant interview, Dolan also created a questionnaire that each participant completed. Using a triangulation method, Dolan reviewed and analyzed interview and questionnaire data to identify patterns or commonalities between online instructors using a self-determined coding system.

Based on qualitative analysis of the interview data, Dolan (2011) identified a number of broad categories where adjunct

online instructors indicated concern and difficulty. These broad categories included poor compensation, lack of materials, lack of communication and connection, little opportunity for professional development, large class sizes, lack of support from administration, and ill-prepared students (Dolan, 2011). As it pertains to this study, Dolan's findings regarding lack of connection are most relevant—specifically feelings of isolation from other faculty members and students as well as overall feelings of disconnection with the larger university. These findings suggest that the flexibility associated with the location of online course delivery (e.g., at home) may actually have negative social-emotional implications and again, implies that if these issues are not adequately addressed, then online instructors may not continue with online instruction.

Online Instruction and Gender Differences

While no studies have been conducted that specifically examine gender differences in the experience of teaching higher education courses online, two of the previously mentioned studies did address gender differences with regard to online teaching. Hogan and McKnight's 2007 study on burnout rates of online instructors yielded evidence to support the claim that online female instructors may be more likely to experience depersonalization as well as lower levels of personal satisfaction compared to on-campus instructors. Hogan and McKnight (2007) used the MBI-ES (Maslach, Jackson, & Leiter, 1996) along with a demographic survey to examine well-being and burnout differences between online and on-campus instructors. In addition to previously reported findings regarding burnout, these researchers found that female online instructors were more likely to report elevated levels of emotional exhaustion ($M = 23.82$, $SD = 11.66$) than their male instructional counterparts ($M = 20.97$, $SD = 11.54$; $t = -1.037$, NS; Hogan & McKnight, 2007). Female online instructors ($M = 9.79$, $SD = 3.92$) also reported higher degrees of burnout in terms of depersonalization than male online instructors ($M = 9.82$, $SD = 5.14$; $t = .02$; Hogan & McKnight, 2007). Finally, female online instructors indicated higher levels of burnout on the personal accomplishment subscale of the MBI-ES ($M = 47.34$, $SD = 4.69$) than males ($M = 46.63$, $SD = 7.62$; $t = -.453$, NS; Hogan & McKnight, 2007).

Welter's (2008) research on differences in the experiences between on-campus and online instructors did not yield significant differences overall between these two groups. However, Welter did examine gender differences within these two groups. Using the PF-SOC (Heppner et al., 1995) to measure coping styles and

the OSI-R (Osipow, 1998) to measure the stress, Welter did not identify significant differences between men and women with regard to their experience of stress overall as it related to teaching online versus on campus. Welter did find slight differences in the coping styles used by female instructors, specifically that females tended to use reflective or suppressive styles of coping as opposed to a reactive style, which was preferred by male instructors. Interesting to note is that demographic data showed 74.7% of participants in the online instructor group were female, while only 38.5% of instructors from the on-campus group were female. This suggests that females may be taking on more roles in online instruction rather than on-campus instruction. With the mixed findings in these two studies, it is suggested that gender differences with respect to online instruction should be further investigated relative to teaching satisfaction and burnout as well as to instruction online in general to determine if more females are instructing online courses than males.

Discussion

As noted above, there has been a paucity of research that has examined the role of online higher education instructors and the associated factors that can impact the overall experience of these educators. While the availability and offering of online higher education courses has grown exponentially in recent years (Yamagata-Lynch, 2014), the research on the well-being and mental health of online instructors is surprisingly limited.

In terms of gender differences in the experience of online educators, again, limited research on this topic makes it difficult to make claims on a generalizable scale. The two studies that reviewed gender differences in experiences of online instruction (Hogan & McKnight, 2007; Welter, 2008) reported contradictory findings related to gender differences in the experience of teaching online courses. This suggests mixed support for our assertion that female online instructors are potentially more susceptible than their male counterparts to the negative social-emotional outcomes associated with online teaching; as such, more research in this area is necessary before drawing conclusions.

Only two studies (Hogan & McKnight, 2007; McCann & Holt, 2009) have directly examined the phenomenon of burnout. Of these two studies, the results in terms of burnout of online instructors versus their on-campus counterparts were very inconsistent, with Hogan and McKnight (2007) finding evidence to support higher levels of burnout in online instructors while

McCann and Holt (2009) did not identify these differences in rates of burnout. With only two studies, it is not possible to make definitive claims regarding heightened burnout of online educators. However, this is a topic that the authors of this review believe is relevant, and should be considered a high priority topic for future investigation.

To further examine potential implications of this line of inquiry, we turn to the research on resiliency of educators and its relation to attrition and mental health. Retention of high quality online instructors is a priority for many higher education institutions, and as such, further investigation of burnout and attrition would be valuable future research. In this regard, we propose that online instructor attrition and retention should be investigated within the context of the broader issue of educator attrition and retention across the teaching profession. In recent decades, high levels of attrition surrounding beginning teachers within public school systems has been well documented (Gyrko, MacCormack, Bless, & Jodl, 2016) and has relevance to both online and on-campus instructors within higher education. Research studies of North American public school districts have established that approximately 40–50% of teachers exit the profession within their first five years (Goldhaber & Cowan, 2015). In Ontario, Canada, McIntyre (2003) predicted that by the second year of teaching, about 18% of new Ontario teachers would be at risk of leaving the profession. Studies conducted in the United States, Australia, and Great Britain confirm similar or higher early teaching attrition rates (Buchanan et al., 2013; Darling-Hammond, 2003; Howard & Johnson, 2004; Lindqvist, Nordänger, & Carlsson, 2014; Stoel & Thant, 2002). The result of beginning teacher attrition is, among other things, an economic strain on the educational system (Hahs-Vaughn & Scherff, 2008). Hence, research that further explores the variables associated with teacher/educator attrition, retention, and transition is important in order to better understand why educators leave teaching, stay teaching, and/or transition from teaching to another role or career. Although it appears that there have been few studies of the retention and attrition of online instructors within higher education settings, it seems reasonable (based on the possible burnout, stress, and emotional well-being issues implicated by the above reported findings) that it should be more specifically investigated and that this research be contextualized within the broader understandings and findings of overall teacher retention and attrition especially within the beginning years of instruction.

This research could be potentially beneficial for teacher education programs in their preparation of students for the teaching profession as well as for institutes of higher education in the preparation of instructors for both online and on-campus instructional delivery. In this regard, research has revealed that public school teachers who are highly satisfied are less likely to quit teaching than those teachers who report being dissatisfied (Kelly & Northrop, 2015; Baker & Smith, 1997; Macdonald, 1999), and this holds true in higher education (Hesli & Lee, 2013). Some research has considered teacher attrition and retention to be associated with individual factors (e.g., family characteristics, demographics, burnout, and resilience) and contextual factors (e.g., teacher support, professional development, student issues, teacher education; Clandinin et al., 2015). Moreover, Flores and Day (2006) noted that the complex notion of identity encompasses individual and contextual factors. These authors stressed the importance of attending to beginning teachers' entire lives in order to better understanding teacher attrition (Flores & Day, 2006), which would seem to be fitting within the context of beginning higher education instructors as well.

Implications for Practice

Resilience, personal efficacy, and emotional intelligence are aspects of one's identity that can influence how an individual adapts to various situations. Resilience is considered to be successful adaptation to significant diversity (Fletcher & Sarkar, 2013). Although little is written about the resilience of beginning teachers or instructors teaching online, it appears applicable to the issue of instructor attrition and retention with respect to both on-site and distance teaching within higher education. In the risk and resilience literature (Benard, 2003; Ebersöhn, 2014; Fletcher & Sarkar, 2013; Masten, 2001; Tusaie & Dyer, 2004), there is consensus that risk factors contribute to psychological distress while protective factors moderate the effects of adversity. Risk factors for novice teachers/instructors might include the stress associated with the first years of teaching in both public school education and higher education such as the nature and scope of the job, disparity between teacher preparation and the reality of the job, and the experience of isolation and lack of support (Klassen & Chiu, 2010). To insulate teachers from the effect of these risk factors, Ebersöhn (2014) suggests that they need, among other things, professional development, caring collegial relationships and opportunities for shared decision-making and planning. Educators can enhance their resilience by fostering productive relationships

with people who understand the trials and tribulations of teaching and who can offer insight into various options for dealing with a variety of teaching situations (Bobek, 2002).

Resilience and personal efficacy are related concepts. In fact, Cazan (2014) lists self-efficacy as one of the characteristics of a resilient person, and similarly, Tschannen-Moran and Hoy (2007) suggest that people with high levels of personal efficacy possess strong resilience. Resilience and personal efficacy differ, however, in the ways they influence action. For example, highly resilient individuals tend to be reactive to stressful situations, whereas highly efficacious individuals tend to be proactive. A teacher's efficacy beliefs appear to be most easily impacted in the early years of teaching experience and somewhat resistant to change once established (Woolfolk & Hoy, 1990). "It may be that change in teacher efficacy occurs rapidly in the early years of teaching as teachers crystallize their professional identity; once consolidated this identity may persist into later years" (Ross, 1994, p. 391). Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) reported that novice teachers completing their first year of teaching who had a high sense of efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced less stress. As such, efforts to increase the self-efficacy and resilience of online instructors in higher education early in their careers would likely be advantageous in lowering the rates of stress, burnout, and emotional distress, which ultimately will decrease attrition.

Conclusion

In sum, although there has been definitive research that has identified the major challenges of beginning teachers that underscore some of the reasons for why teachers leave the teaching profession early, there has been limited research on the variables that are associated with teacher attrition, retention, and transition that can provide insight into why some teachers (including higher education online teachers) can overcome and adequately address the challenges and issues they face, why others may not or cannot overcome these challenges, and why some teachers stay in teaching while others leave teaching for other roles and careers. Hence, all instructors (including online instructors in higher education) may be influenced by not only the factors that lead to burnout, stress, and dissatisfaction but also by their personal characteristics that can either enable or disable them when confronted with these factors.

With the growth of online delivery of education, specifically higher education, further research that focuses on the factors

associated with the mental health and well-being of online instructors is considered to be worthwhile by the authors of this review. Hence, we plan to further investigate the mental health and well-being of higher education online instructors within the early years of their experience within a school psychology graduate program relative to individual factors (e.g., personal efficacy, identity, and resilience) and contextual factors (e.g., technological support, student management, and professional development) associated with retention and attrition.

REFERENCES

- Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. Sloan Consortium Newburyport, MA.
- Appana, S. (2008). A review of benefits and limitations of online learning in the context of the student, the instructor, and the tenured faculty. *International Journal on E Learning*, 7(1), 5-22.
- Baker, D. P., & Smith, T. M. (1997). Three trends in the condition of education in the United States. *Teachers College Record*, 99, 12-61.
- Benard, B. (2003). Turnaround teachers and schools. In B. Williams (Ed.), *Closing the achievement gap: A vision for changing beliefs and practices*. Alexandria VA: Association for Supervision and Curriculum Development.
- Bobek, B. L. (2002). Teacher resiliency: A key to career longevity. *The Clearing House*, 75(4), 202-205.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3), 112-129.
- Cazan, A. M. (2014). Academic resilience and academic adjustment for the first-year university students. *2nd World Congress on Resilience: From Person to Society*, 321-325. Bologna: Medimond-International Proceedings.
- Clandinin, D. J., Long, J., Schaefer, L., Downey, C. A., Steeves P., Pinnegar, E., Robblee, S. M., & Wnuk, S. (2015). Early career teacher attrition: Intentions of teachers beginning. *Teaching Education*, 26(1), 1-16, DOI:10.1080/10476210.2014.996746.

- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60(8), 6-13.
- Dolan, V. L. (2011). The isolation of online adjunct faculty and its impact on their performance. *The International Review of Research in Open and Distributed Learning*, 12(2), 62-77.
- Ebersöhn, L. (2014). Teacher resilience: Theorizing resilience and poverty. *Teachers and Teaching*, 20(5), 568-594.
- Fletcher, D., & Sarkar, M. (2013). Psychological resilience. *European Psychologist*, 18, 12-23.
- Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi perspective study. *Teaching and Teacher Education*, 22, 219-232.
- Goldhaber, D., & Cowan, J. (2014). Excavating the teacher pipeline: Teacher preparation programs and teacher attrition. *Journal of Teacher Education*, 65(5), 449-462.
- Gyurko, J., MacCormack, P., Bless, M., & Jodl, J. (2016). *Why colleges and universities need to invest in quality teaching more than ever: Faculty development, evidence-based teaching practices, and student success*. New York: Association of College and University Educators.
- Hahs-Vaughn, D. L., & Scherff, L. (2008). Beginning English teacher attrition, mobility, and retention. *The Journal of Experimental Education*, 77, 21-53.
- Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, C. W. (1995). Progress in resolving problems: A problem-focused style of coping. *Journal of Counseling Psychology*, 42, 279-293.
- Hesli, V. L., & Lee, J. M. (2013). Job satisfaction in academia: Why are some faculty members happier than others? *PS: Political Science & Politics*, 46(2), 339-354.
- Hill, N. R. (2004). The challenges experienced by pre-tenured faculty members in counselor education: A wellness perspective. *Counselor Education and Supervision*, 44, 135-146.
- Hogan, R. L., & McKnight, M. A. (2007). Exploring burnout among university online instructors: An initial investigation. *The Internet and Higher Education*, 10(2), 117-124.
- Howard, S., & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology of Education*, 7(3), 399-420.
- Kelly, S., & Northrop, L. (2015). Early career outcomes for the "best and the brightest": Selectivity, satisfaction, and

- attrition in the Beginning Teacher Longitudinal Survey. *American Educational Research Journal*, 52(4), 624-656.
- Klassen, R. M., & Chiu, M. M. (2010). Effects of teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 28-35.
- Li, Q., & Akins, M. (2005). Sixteen myths about online teaching and learning in higher education: Don't believe everything you hear. *Tech Trends: Linking Research and Practice to Improve Learning*, 49(4), 51-60.
- Lindqvist, P., Nordänger, U. K., & Carlsson, R. (2014). Teacher attrition the first five years: A multifaceted image. *Teaching and Teacher Education*, 40, 94-103.
- Li, C. S., & Irby, B. (2008). An overview of online education: Attractiveness, benefits, challenges, concerns and recommendations. *College Student Journal*, 42(2), 449-458.
- Lovett, S., & Davey, R. (2009). Being a secondary English teacher in New Zealand: Complex realities in the first 18 months. *Professional Development in Education*, 35, 547-566.
- Macdonald, D. (1999). Teacher attrition: A review of the literature. *Teaching and Teacher Education*, 15, 835-848.
- Maslach, C., Jackson, S., & Leiter, M. (1996). *Maslach burnout inventory manual*. (3rd Ed.). Palo Alto, CA: Consulting Psychologists Press.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238.
- Martel, C. (2015). *Online and distance education capacity of Canadian universities*. Montreal, Quebec: EduConsillium.
- McCann, J. T., & Holt, R. (2009). An exploration of burnout among online university professors. *International Journal of E-Learning & Distance Education*, 23(3), 97-110.
- McIntyre, F. (2003). *Transition to teaching: New teachers of 2001 and 2002. Report of their first two years of teaching in Ontario*. Toronto, ON: Ontario College of Teachers.
- McNally, J., Blake, A., & Reid, A. (2009). The informal learning of new teachers in school. *Journal of Workplace Learning*, 21, 322-333.
- Osipow, S. H. (1998). *Occupational stress inventory-revised edition (OSI-R): Professional manual*. FL: Psychological Assessment Resources, Inc.

- Platt, C. A., Raile, A. N. W., & Yu, N. (2014). Virtually the same?: Student perceptions of the equivalence of online classes to face-to-face classes. *MERLOT Journal of Online Learning and Teaching*, 10(3), 489–503.
- Ross, J. A. (1994). The impact of an inservice to promote cooperative learning on the stability of teacher efficacy. *Teaching and Teacher Education*, 10(4), 381–394.
- Sangganjanavanich, V. F., & Balkin, R. S. (2013). Burnout and job satisfaction among counselor/educators. *Journal of Humanistic Counseling*, 52(1), 67–79.
- Shakrani, S. (2008). *Teacher turnover: Costly crisis, solvable problem*. Michigan State University, College of Education.
- Smith, G. S., Brashen, H. M., Minor, M. A., & Anthony, P. J. (2015). Stress: The insidious leveler of good, unsuspecting, online instructors of higher education. *Journal of Social Change*, 7(1), 56–68.
- Stern, B. S. (2004). A comparison of online and face-to-face instruction in Undergraduate Foundations of American Education course. *Contemporary Issues in Technology and Teacher Education*, 4(2), 196–213.
- Stoel, C. F., & Thant, T. S. (2002). *Teachers' professional lives—A view from nine industrialized countries*. Washington, DC: Milken Family Foundation (Council for Basic Education: Schools Around the World).
- Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. *Teacher Education Quarterly*, 35(4), 57–75.
- Taylor, R. W. (2002). Pros and cons of online learning—a faculty perspective. *Journal of European Industrial Training*, 26(1), 24–37.
- Tusaie, K., & Dyer, J. (2004). Resilience: a historical review of the construct. *Holistic Nursing Practice*, 18(1), 3–8.
- Tschannen-Moran, M., & Hoy, W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and teacher Education*, 23(6), 944–956.
- Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202–248.
- Welter, T. P. (2008). *Determining the experiences of distance learning instructors as related to stress experienced and unique coping abilities* (Doctoral dissertation). Retrieved from ProQuest.

- Wood, T., & McCarthy, C. (2004). *Understanding and Preventing Teacher Burnout (Report No. EDO-SP 2002-03)*. Washington, DC: Office of Educational Research and Improvement.
- Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82(1), 81-91.
- Yamagata-Lynch, L. C. (2014). Blending online asynchronous and synchronous learning. *The International Review of Research in Open and Distributed Learning*, 15(2), 189-212.

Address for Correspondence**Erica Makarenko**

University of Calgary
EDT 506, 2500 University Drive NW
Calgary, Alberta Canada T2N 1N4
embacken@ucalgary.ca

Jac J.W. Andrews

University of Calgary
EDT 516, 2500 University Drive NW
Calgary, Alberta Canada T2N 1N4
jandrews@ucalgary.ca

