Effective Internal Communication and Teacher Burnout: A Review of Relevant Literature

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ABSTRACT

Teacher burnout is a phenomenon that has ravaged the teaching profession over the years, drawing the attention of scholars from the education field. Due to its prevalence, numerous studies have been conducted to ascertain its causes, effects as well as the possible remedies to it. While there may not be panacea for burnout, it is essential that continual research be undertaken to unearth more effective ways of tackling teacher burnout. Research has established that communication plays a significant role in impacting burnout. It is against this backdrop that the researchers aim to make a case for internal communication as a feasible solution to counteracting teacher burnout. In line with this purpose, this article reviews relevant literature on teacher burnout and internal communication showing a connection between the two variables.

Key Words: Teacher burnout, organizational communication variables, internal communication.

I. INTRODUCTION

Teaching is one of the oldest professions in history and doubles up as one of the noblest of them all. Taking into account the pivotal role played by teachers in nurturing young minds, it goes without saying that the influence of a teacher cannot be emphasized enough. As Kilonzo, Were and Odhiambo (2018) aver, the teacher is at the heart of the education process and therefore holds the power to heal, build up or destroy those who go through this process.

Research on internal communication in different fields over the years has revealed that when effectively put to use, internal communication has a plethora of benefits for both employees and organizations. Some of these benefits include high employee engagement, motivation, loyalty, and innovation levels, better crisis management practices, and satisfactory customer/client experience which generates higher revenue (Clampitt & Downs, 2012; Atouba, 2018). These findings apply in the education sector as well since teachers too are employees and thus internal stakeholders of institutions. Teachers when engaged and motivated thrive in their work and consequently greatly influence their students positively both within the classroom walls and beyond.

Scholars emphasize the crucial role of teachers in achieving educational objectives. Kimeli, Kipkoech & Kirwa (2017) for example aver that, teachers are responsible for translating policy into actions and principles through their interactions with students. The profession, however, is plagued by a myriad of challenges that threaten to hamper progress, among them is burnout. Teaching ranks among the professions in which burnout is highly prevalent with educators found to be more prone to experiencing burnout compared to professionals in other fields. This is an assertion that is echoed by scholars globally (Agyapong, Donkor, Burback & Wei, 2022; Akdemir, 2019; Scott, 2019; Smetackova, 2017).

A great deal of studies, some of which are cited in this article, have shown that teacher burnout can be attributed to demographic factors as well as contextual factors such as administrative support, class size, remuneration, student discipline, workload and availability of resources have also been linked to burnout occurrence. Moreover, there is literature that has ventured beyond these factors to access the probability of internal communication playing a role in either triggering or pacifying burnout. The following review of literature aims to initiate academic dialogue around the likely relationship between internal communication and teacher burnout as it discusses both general and empirical literature these two variables and the possible link between them.

A. What is Burnout and What are the Probable Causes?

Maslach (2001) defines burnout as the continued response to chronic emotional and interpersonal stressors while on the job. Maslach avers that burnout has three dimensions which are emotional exhaustion (EE), depersonalization (DP) and reduced personal achievement (RPA). EE denotes the depletion of an individual's emotional resources, DP on the other hand signifies a cynical, detached and/or negative attitude towards one's job and work environment. Maslach defines the last dimension, RPA as the feeling of ineffectiveness or incompetence at work. The World Health Organization's (WHO) 2019 definition of burnout tallies with that of Maslach as it defines it as a syndrome that is characterized by feelings of exhaustion, mental detachment from one's job and experiencing a sense of inadequacy in one's professional efficacy. It is worth noting that WHO recognizes burnout as an occupational phenomenon rather than a medical condition (WHO, 2019).

Even though burnout may manifest in professionals in any career sphere, research indicates that those working as educators at any teaching level are among those more likely to experience it because of the nature of their work (Agyapong, Donkor, Burback & Wei, 2022; Akdemir, 2019; Scott, 2019; Smetackova, 2017). For instance, a study by Heus & Diekstra (1999) found that burnout was rifer in the teaching field than other professions. The study which assessed teacher burnout vis-à-vis burnout in other social professions such as nursing, physical and mental health professions established that burnout rates among teachers were significantly higher. Though a meta-analysis by Squillaci (2020) shows physicians to have the highest burnout scores, it also reveals that educators register the lowest personal achievement scores, which is a significant dimension of burnout. To compound on teacher burnout extent, a recent study conducted by the Gallup Panel Workforce in the United States also found educators to exhibit the highest levels of burnout in comparison to the workforce in other sectors (Marken & Agrawal, 2022). These findings provide potent evidence of the high vulnerability of educators to burnout in contrast to workers in other fields.

Overtime, many scholars have therefore dedicated their efforts towards studying burnout in the teaching field and in the process ascertained varied factors that correlate to burnout. Some of these factors are demographic such age, gender and marital status. For instance, studies have shown young educators especially those in their thirties and below experience higher burnout levels compared to their older colleagues (Li et al., 2020; El Helou et al., 2016; Zhang, Zhang & Hua, 2019). Findings on other demographics such as marital status have so far been inconclusive as some indicate that single teachers register higher burnout levels (Mousavy & Nimehchisalem, 2014; Al-Asadi et al., 2018). Other studies show their married counterparts experience higher burnout (Li et al. 2020; El Helou, Nabhani & Bahous, 2016) while some findings establish no correlation between the two variables (Atmaca, 2017; Murali, 2016).

Aside from demographics, contextual factors related to the profession such as remuneration, inadequate resources, class size just to name a few have been found to accelerate teacher burnout. Zhang, Zhang & Hua (2019) established that class size plays a big role in triggering burnout in that, teachers who attended large classes developed more burnout symptoms compared to their counterparts who handled smaller classes. In their study, Amzat, Kaur, & Al-Ani (2021) found that high workload and job demands as well as lack of adequate facilities and resources are the primary factors that lead to teacher burnout. Concerning students, research indicates that lack of discipline is a strong predictor of teacher burnout (Amzat, Kaur & Al-Ani, 2021; Gilmour et al., 2021; Skaalvik & Skaalvik, 2017) as discipline problems overtime affect the teachers' attitude towards the students and their work at large. Having discussed burnout and its probable antecedents, the extent of teacher burnout and its effects must be highlighted so that the severity of this phenomenon can be well comprehended.

B. Prevalence of Burnout and its Effects

Rather than being a problem limited to a specific region, research indicates that teacher burnout is a global concern both in developed and developing nations. Studies have shown that 10-20% of teachers could be experiencing high burnout worldwide (Bermejo-Toro, Prieto-Ursúa & Hernández, 2016). This is plausible since findings from different contexts such as Europe, the United States, China, South Korea, Thailand and Kenya to mention a few, report that educators experience high levels of work stress and burnout (Ratanasiripong et al., 2022; Bulatevych, 2018; Kilonzo, Were & Odhiambo, 2018; Yorulmaz, Colak, & Altinkurt, 2017; Greenberg, Brown & Abenavoli, 2016; Kim et al., 2016; Sichambo, Maragia & Simiyu, 2012). Research shows that the occurrence of the COVID-19 pandemic further catalysed and heightened teacher burnout globally as cases of absenteeism, reduced performance, and psychological and physical health problems were witnessed to be on the rise (Gómez-Domínguez et al., 2022). These findings paint a bleak picture of an otherwise noble profession and should be enough to drum up concern from all the stakeholders in the education sector.

If not handled appropriately and with the immediacy and gravitas it deserves, teacher burnout stands to cripple entire education systems. The ripple effects of this phenomenon have been argued (Salmela-Aro, Hietajärvi & Lonka, 2019; Zhang, Zhang & Hua, 2019) to not only plague the teacher but also trickle down to the learners and other stakeholders. One such effect is high turnover intentions which has seen the sector suffer acute attrition as educators abandon the profession for other career pursuits. In the U.S. for example, a 2017 national survey revealed that 18% of public-school principals quit the profession in that year alone, most of the exits being attributed to burnout (Goldring & Taie, 2018). Still on the U.S., research shows that 24-42% of teachers quit within their first 5 years of teaching citing among other factors, high work stress. This high turnover has resulted in more negative outcomes such as decline in students' achievement, compromised relationships between schools and communities. Furthermore, teacher turnover has been a costly affair for U.S schools which lose an estimated 7 billion dollars a year due to rapid turnover (Greenberg, Brown & Abenavoli, 2016).

Studies conducted in Kenya have indicated similar findings regarding teacher attrition. A study done in Uasin Gishu County revealed that 63.4% of teachers reported teacher attrition rates to be high and extremely high in their respective schools (Mabeya, Gikuhi & Anyona, 2019). In a different study conducted in Machakos County, Kenya, majority of the respondents (80%) agreed that high teacher turnover plagued their corresponding schools (Kilonzo, Were & Odhiambo, 2018). Moreover, according to a 2015 report released by the Kenyan teachers' employer, Teachers Service Commission (TSC), the year bracket 2010-2015 had seen close to 64% of principals in the country leave the profession citing work stress the driving cause (Aomo & Ogolla, 2018).

With such statistics indicating mass teacher turnover worldwide, more cases of teacher shortages should be anticipated. UNESCO (2019) relatedly reported extreme teacher shortage globally stating that an additional 68.8 million teachers will have to be recruited by 2030 with 15 million of these needed the sub-Saharan Africa only (TTF, 2021). More exits from the profession would mean widening of the teacher shortage gap and more pressure on the teacher already handling a pupil-teacher ratio way beyond the UNESCO internationally recommended ratio of 40:1 in primary and 25:1 in secondary levels. This would ultimately be detrimental to the education sector.

Other than turnover intentions, burnout has also been linked to other negative outcomes that are detrimental to the education process. Some of them include: poor working relationships among colleagues (Ngari et al., 2013) due to increased cynicism which is a component of burnout, chronic absenteeism from school (Makhdoom, Atta & Malik, 2019), lack of job motivation (McLean, Taylor, Jimenez, 2019) and decline in students' general wellbeing (Meredith et al., 2020; Greenberg, Brown & Abenavoli, 2016). Even more dire are effects linked to burnout that weigh on the teacher's health such as insomnia, gastrointestinal disturbances, depression, cardiovascular and nervous system disorders among others. In light of the above literature on teacher burnout and its severe effects, it goes without saying that this a phenomenon that requires prompt attention.

While studies are continually being conducted with a view to finding lasting remedies to counter burnout, it is important that scholars engage diverse fields and avenues to seek solutions. Related to this, a factor such as internal communication appears to be quite underexplored as a plausible piece in this puzzle of solution-seeking. Internal communication has been argued to influence the existence a conducive work environment consequently fostering healthy work relationships. Since burnout is as a result of an individual's chronic experience with the work conditions in their professional settings, this begs the question, could the effectiveness of internal communication influence burnout occurrence or prevalence?

C. What is Internal Communication and why is it Important?

Internal communication refers to the process of information exchange between managers or those who run an organization and employees (Mishra, Boynton & Mishra, 2014; Kalogiannidis, 2021). According to Martinez & Hurtado (2018), effective internal communication is vital for ensuring that an organization's values, goals and objectives are conveyed to, understood and embraced by all employees. This facilitates the alignment of employees' actions to the organization's overall strategy which in turn leads to more efficient and productive operations that ultimately help achieve organizational goals. Scholars have long linked effective internal communication to an array of benefits for both individual employees and the institutions they are attached to. Mishra, Boynton & Mishra (2014) for instance, posit that strong internal communication has the potential to build trust and commitment among employees driving them to perform better in their roles. This type of communication has also been found to inspire more positive outcomes in individuals such as: increased productivity, enhanced creativity, and improvement in the quality of services offered (Martinez & Hurtado, 2018). Furthermore, effective internal communication can lead to increased job satisfaction and at the same time reduce turnover intentions and rates (Ali et al., 2021), a problem that is currently rife in the teaching profession.

D. Internal Communication as a Remedy to Teacher Burnout

Various scholars have established links between a variety of communication variables and teacher burnout. Starnaman & Miller (1992) conducted a study that targeted teachers, administrators and support staff in a mid-size urban school district in the Midwest of the US. The scholars tested a casual model intending to assess the relationships among burnout, communication, and organizational stressors and outcomes in the teaching profession. The model covered the burnout process with the increased workload, role conflict, and role ambiguity as triggers of burnout and two communication variables; supervisory support and participation in decision-making as mediating variables. This investigation revealed that work overload was directly related to role conflict and increased exhaustion as well as depersonalization from students. Role ambiguity and role conflict were also found to enhance burnout, however principal support (supervisory) was found to decrease both role ambiguity and role conflict. However, scholars argue that overemphasis on this support may turn detrimental and may trigger depersonalization. Participation in decision-making on the other hand was found to decrease role stress and burnout directly as a result of high-involvement management. These findings validate the existence of a relationship between communication variables and burnout in the education field.

A different study related to organizational communication variables and burnout was conducted by Brown & Roloff (2015) in the U.S. The study which targeted teachers from both public and private high schools tested the mediating role of communication variables on the relationship between extra role time citizenship behaviours (ERT-OCB) and burnout. The findings revealed that two organizational communication variables; perceived organizational support and psychological contract fulfilment had a strong association with burnout. These two communication variables were found to play a buffering role on assessment of the relationship between extra role time citizenship behaviours (ERT-OCB) and burnout. The more the levels of the two variables were enhanced, the weaker the role of extra role time in predicting burnout became. The scholars thus surmised that the nature of communication effected by an organization or institution can influence burnout.

While these studies have investigated varied communication variables in relation to teacher burnout, there is a paucity of research on internal communication per se as a variable despite its many advantages organizations. According to Atouba & Lammers (2020) who conducted a study on the relationships between participative organizational communication practices and burnout among IT professionals, internal communication adequacy has an impact on burnout. The study which was conducted in an IT organization based in the Midwest of the U.S. found that two organizational communication practices (employee work participation and internal communication adequacy) play significant roles in reducing burnout. Drawing focus on internal communication, the latter was found to have a positive association with employees' professional efficacy but negatively associated with cynicism.

The scholars further concluded that with internal communication, when both the quality and quantity of communication are enhanced, it can effectively bolster professional efficacy leading to employees' satisfaction and successful performance in their roles. Concerning cynicism, the scholars postulate that adequate internal communication prevents the occurrence of rifts in the organization-employee that would otherwise cause distrust, disillusionment, and even contentment on the part of the employee towards the organization. These findings by Atouba & Lammers (2020) though based in a different field, give strong credence to the theoretical idea that if effectively utilized, internal communication may be a potential game changer in the efforts towards mollifying teacher burnout as well.

Literature point to the gap between internal communication and the persistent cases of burnout. Indeed, the lack of effective communication seems to suggest that those tasked with the noble teaching profession have been left on their own. Whenever the top bottom flow of information is impaired, there is a resultant response on the bottom-up communication (in form of feedback and suggestions). Invariably, literature shows a troubled horizontal communication as what teachers seem to hear are complaints from fellow teachers. In a sense, a convoluted communication system exacerbates burnout and makes the teaching job less attractive. Studies focusing on the burnout among teachers (and by extension other professions) need to include internal communication as a sufficient factor among other necessary factors that need to be explored.

It would follow, then, that ministries charged with education matters need to refocus and ensure that an elaborate communicative environment in caused to exit in learning institutions. While it would be inconclusive to the conclude that an effective internal communication would be the panacea to all troubles leading to burnout, having an effective communication system should help stabilize the concerns and thus allow information sharing and ensure that management has collected and collated information that would help solve important problems. As enshrined in the etymological foundations of communication, a problem shared and understood becomes an essential part of solving the very problem.

II. WAY FORWARD

The noble profession of teaching is laden with various hurdles, burnout being a prevalent one. Many of the factors triggering teacher burnout such as class size, remuneration and limited resources may require a ton of financial muscle to be fully attended to. However, as the world still struggles to recover from the ripple effects of COVID-19 especially economically and financially, for many countries these obstacles may be difficult to control or address promptly. It is therefore crucial that new and innovative solutions to managing teacher burnout be sought out. In line with this, the few existent studies on organizational communication and teacher burnout show a viable link between the two variables, suggesting effective use of internal communication as a probable key to tackling this phenomenon. The potential for this strategy provides a promising avenue worth exploring as further investigation will aid in fully understanding its effectiveness and may stand to enable relevant authorities in the education sector to turn the tide of burnout making it possible for educators to thrive in their roles.

III. REFERENCES

- Agyapong, B., Obuobi-Donkor, G., Burback, L., Wei, Y. (2022). Stress, burnout, anxiety and depression among teachers: A scoping review. International Journal of Environmental Research and Public Health 19(17), 10706. https://doi.org/10.3390/ijerph191710706
- Akdemir, O. A. (2019). The effect of teacher burnout on organizational commitment in Turkish context. **Journal** of **Education** and **Training** Studies 7(4),171-179. https://doi.org/10.11114/jets.v7i4.4067
- Al-Asadi, J., Khalaf, S., Al-Waaly, A., Abed, A., & Shami, S. (2018). Burnout among primary school teachers in Iraq: Prevalence and risk factors. East Mediterranean Health Journal 24(3), 262–268.
- Ali, B. J., Anwar, G., Gardi, B., Othman, B. J., Aziz, H. M., Ahmed, S. H., Hamza, P. A., Ismael, N. B., Sorguli, S., Sabir, B. Y. (2021). Business communication strategies: Analysis of internal communication processes. Journal of Humanities and Education Development 3(3), 16-38. https://dx.doi.org/10.22161/jhed.3.3.4
- Amzat, I. H., Kaur, A., Al-Ani, W., Mun, S., & Ahmadu, T. S. (2021). Teacher burnout and coping strategies to remain in teaching job in Malaysia: An interpretative phenomenological analysis. European Journal of Educational Research, 10(3),1075-1088. https://doi.org/10.12973/eu-jer.10.3.1075
- Aomo, J. A., & Ogolla, P. O. (2018). Principals' stress in public secondary schools in Kisumu County, Kenya. Self-efficacy as a predictor of stress management among secondary school principals in Kenya. International Journal of Educational Policy Research and Review 5(5), 77-82. https://doi.org/10.15739/IJEPRR.18.009
- Atmaca Ç. (2017). A burning issue among English teachers: Reflections of in-service teachers on job satisfaction and burnout. ELT Research Journal 6(1), 89-115.
- Atouba, Y. C. (2018). Tackling the turnover challenge among IT workers: Examining the role of internal communication adequacy, employee work participation, and organizational identification. Communication Reports 31(3), 174-187. https://doi.org/10.1080/08934215.2018.1497180
- Atouba, Y. C., & Lammers, J. C. (2020) Examining the relationships between participative organizational communication practices and burnout among IT professionals. Total Quality Management & Business Excellence 31(7-8), 814-828. https://doi.org/10.1080/14783363.2018.1447367
- Bermejo-Toro, L., Prieto-Ursúa, M., & Hernández, V. (2016): Towards a model of teacher wellbeing: Personal and job resources involved in teacher burnout and engagement. Educational Psychology 36(3), 481-501. http://dx.doi.org/10.1080/01443410.2015.1005006
- Brown, L. A., & Roloff, M. E. (2015). Organizational citizenship behavior, organizational communication, and burnout: The buffering role of perceived organizational support and psychological contracts. Communication *Ouarterly* 63(4), 384-404. http://dx.doi.org/10.1080/01463373.2015.1058287
- Bulatevych, N. (2017). Teacher's burnout syndrome: The phenomenology of the process. *Polish* Journal of Public Health 127(2) 62-66. https://doi.org/10.1515/pjph-2017-0014
- Clampitt, P., & Downs, C. W. (2012). Communication satisfaction: A review of the literature. Kansas: University of Kansas.
- El Helou M., Nabhani M., Bahous, R. (2016). Teachers' views on causes leading to their burnout. Leadership Management, 36(5), 551-567. School & http://dx.doi.org/10.1080/13632434.2016.1247051

- Gómez-Domínguez, V., Navarro-Mateu, D., Prado-Gascó, V. J., & Gómez-Domínguez, T. (2022). How much do we care about teacher burnout during the pandemic: A bibliometric review. International Journal of Environmental Research and Public Health 19(12), 1-24. https://doi.org/10.3390/ijerph19127134
- Gilmour, A. F., Sandilos, L. E., Pilny, W. V., Schwartz, S., & Joseph H. Wehby, J. H. (2021). Teaching students with emotional/behavioral disorders: Teachers' burnout profiles and classroom management. Journal of Emotional and Behavioural Disorders 30(1) 1-13. DOI: 10.1177/10634266211020258
- Goldring, R., & Taie, S. (2018). Principal attrition and mobility: Results from the 2016-17 Principal Follow-up Survey First Look (NCES 2018-066). U. S. Department of Education. Washington DC: National Center for Education Statistics.
- Greenberg, M. T., Brown J. L., Abenavoli, R. M. (2016). Teacher Stress and Health Effects on Teachers, Students, and Schools. Edna Bennett Pierce Prevention Research Centre, Pennsylvania State University.
- Heus, P., & Diekstra, R. (1999). Do teachers burn out more easily? A comparison of teachers with other social professions on work stress and burnout symptoms. In R. Vandenberghe & A. Huberman (Eds.), Understanding and preventing teacher burnout: A sourcebook of international research and practice (The Jacobs Foundation Series on Adolescence, pp. 269-284). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511527784.019
- Kalogiannidis, S., (2021). Business trust and communication as predictors of business growth. WSEAS Transactions on Business and Economics 18, 1512-1522. https://orcid.org/0000-0002-2337-5775
- Kilonzo, T., Were, S., & Odhiambo, R. (2018). Job burnout and performance of teachers in secondary schools in Machakos County in Kenya. The Strategic Journal of Business & *Change Management* 5(1), 551-583.
- Kim, W. H., Ra, Y., Park, J. G., & Kwon, B. (2016). The role of burnout in job level, job satisfaction and task performance. Leadership and Organization Development Journal 38(5) 630-645. DOI 10.1108/LODJ-11-2015-0249
- Kimeli, J., Kipkoech L., & Kirwa, M. (2017). The influence of teacher workload on learners' academic performance in public secondary schools in Keiyo Sub- County, Kenya. Elixir Psychology 109, 47965-47969.
- Li, S., Li, Y., Lv, H., Jiang, R., Zhao, P., Zheng, X., Wang L., Li, J., and Mao, F. (2020). The prevalence and correlates of burnout among Chinese preschool teachers. BMC Public Health 20(1), 1-10. https://doi.org/10.1186/s12889-020-8287-7
- Mabeya, M. T., & Gikuhi, M., & Anyona, N. J. (2019). Influence of working conditions on teacher attrition in public secondary schools in Uasin Gishu County, Kenya. European Journal of Education Studies 6(5), 87-102. doi: 10.5281/zenodo.3366080
- Makhdoom, I. F., Atta, M., Malik, N. I. (2019). Counterproductive work behaviours as an outcome of job burnout among high school teachers. Bulletin of Education and Research 41(2), 79–92.
- Marken, S., & Agrawal, S. (2022). K-12 workers have the highest burnout rate in U.S. https://news.gallup.com/poll/393500/workers-highest-burnout-rate.aspx
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review of Psychology 52, 397–422. https://doi.org/10.1146/annurev.psych.52.1.397
- Martinez, L. A. M., & Hurtado, S. R. F. (2018). Internal communication issues in firms: Does it affect productivity? Review European the of Studies 10(2),1-13. https://doi.org/10.5539/res.v10n2p1

- McLean, L.; Taylor, M.; Jimenez, M. (2019). Career choice motivations in teacher training as predictors of burnout and career optimism in the first year of teaching. Teaching and Teacher Education 85, 204-214.
- Meredith, C., Schaufeli, W., Struyve, C., Vandecandelaere, M., Gielen, S., & Kyndt, E. (2019). "Burnout contagion" among teachers: A social network approach. Journal of Occupational and Organizational Psychology, 93(2), 328-352. https://doi.org/10.1111/joop.12296
- Mishra, K., Boynton, K., & Mishra, A. (2014). Driving employee engagement: The expanded role of internal communications. International Journal of Business Communication 51(2), 183-202. DOI: 10.1177/2329488414525399
- Mousavy, S., & Nimehchisalem, V. (2014). Contribution of gender, marital status, and age to English language teachers' burnout. Advances in language and literary studies, 5(6), 39-47. https://doi.org/10.7575/aiac.alls.v.5n.6p.39
- Murali, M. (2016). Burnout of school teachers. *International Journal of Applied Research* 2(3), 22-24.
 - https://www.allresearchjournal.com/archives/?year=2016&vol=2&issue=3&part=A&Articl eId=1606
- Ngari, S. M., Ndungu, A., Mwonya, R., Ngumi, O., Mumiukha, C., Chepchieng, M., & Kariuki, M. (2013). Levels of stress among secondary school administrators and its implication in education management in Kenya. Educational Research and Reviews 8(11), 677-681. DOI: 10.5897/ERR10.021
- Ratanasiripong, P., Ratanasiripong, N. T., Nungdanjark, W., Thongthammarat, Y., & Toyama, S. (2022). Mental health and burnout among teachers in Thailand. Journal of Health Research 36(3), 404-416. DOI 10.1108/JHR-05-2020-0181
- Salmela-Aro, K., Hietajärvi, L., & Lonka, K. (2019) Work burnout and engagement profiles among teachers. Frontiers in Psychology. 10, Article 2254. doi:10.3389/fpsyg.2019.02254
- Scott, S. B. (2019). Factors influencing teacher burnout and retention strategies. [Scholarly project]. Honours Research Projects. https://ideaexchange.uakron.edu/honors_research_projects/798
- Sichambo, M. N., Maragia, S. N., & Simiyu, A. M. (2012). Causes of burnout among secondary school teachers: A case of Bungoma North District-Kenya. International Journal of Academic Research in Progressive Education and Development 1(4), 195-202
- Skaalvik, E. M. & Skaalvik, S. (2017). Dimensions of teacher burnout: Relations with potential stressors. Social Psychology of Education 20(4) 775-790. DOI 10.1007/s11218-017-9391-
- Smetackova, I. (2017). Self-efficacy and burnout syndrome among teachers. The European Journal of Social and Behavioural Sciences, 20(3) 228-241. doi: 10.3389/fpsyg.2019.02287
- Starnaman, S. M., & Miller, K. I. (1992) A test of a causal model of communication and burnout in the teaching profession. Communication Education 41(1), 40-53. http://dx.doi.org/10.1080/03634529209378869
- Squillaci, L. M. (2020). Are teachers more affected by burnout than physicians, nurses and other professionals? A systematic review of the literature. In N. Lightner, & J. Kalra (eds) Advances in human factors and ergonomics in healthcare and medical devices. AHFE 2019. Advances in intelligent systems and computing, vol 957. Springer, Cham. https://doi.org/10.1007/978-3-030-20451-8_14
- Task Force on Teachers for Education 2030 (TTF). (2021). Closing the gap: Ensuring there are enough qualified and supported teachers in sub-Saharan Africa. https://teachertaskforce.org/knowledge-hub/closing-gap-ensuring-there-are-enoughqualified-and-supported-teachers-in-sub-saharan

- UNESCO. (2019, October 7). Attracting and retaining young teachers: World Teachers' Day 2019 Asia-Pacific Regional Forum. https://en.unesco.org/news/attracting-and-retainingyoung-teachers-world-teachers-day-2019-asia-pacific-regional-forum
- World Health Organization (WHO). (2019, May). Burnout an "occupational phenomenon": International classification of diseases. https://www.who.int/news/item/28-05-2019-burnout-an-occupational-phenomenon-international-classification-of-diseases
- Yorulmaz, Y. I., Colak, I., & Altinkurt, Y. (2017). A meta-analysis of the relationship between teachers' job satisfaction and burnout. Eurasian Journal of Educational Research, 71, 175-192. https://doi.org/10.14689/ejer.2017.71.10.
- Zhang, Y., Zhang, S., & Hua, W. (2019). The impact of psychological capital and occupational stress on teacher burnout: Mediating role of coping styles. Asia-Pacific Education Researcher 28(4), 339–349. https://doi.org/10.1007/s40299-019-00446-4