TEACHERS' COMPASSION FATIGUE IN TEACHING: AN EXPLORATORY SEQUENTIAL DESIGN

NESTE ANN S. BERNAL

Central Mindanao Colleges, Kidapawan City, Philippines.
Corresponding email: nbernal@cmc.edu.ph

ABSTRACT

This study explores teachers' compassion fatigue in teaching through an exploratory mixed-method design. The approach involves an initial qualitative phase followed by a quantitative phase, with a final integration of data from both phases. More specifically, it aimed to construct, develop and evaluate the dimensions of teachers' compassion fatigue in teaching scale. In the qualitative phase, there were seven teachers who participated in the in-depth interview and ten teachers participated in the focus group discussion. There were five themes that emerged from the interview that put emphasis on workload and stress, lack of resources and support, student behavior and discipline challenges, emotional engagement and investment, and lack of autonomy and control. A 90-item new approaches of teaching scale was also constructed based from the results of the interview, which was subjected to the quantitative phase. In the quantitative phase, 200 questionnaire responses were analyzed for exploratory factor analysis (EFA). Results showed five underlying dimensions of teachers' compassion fatigue in teaching. The study found high internal consistency among the five factors, with Emotional Engagement and Investment, Lack of Autonomy and Control, and Lack of resources and support, Student behavior and discipline challenges, and Workload and Stress demonstrating commendable to perfect reliability ($\alpha = 0.957$ to 1.000). The overall Cronbach's Alpha is 0.885. A total of five themes on dimensions of teachers' compassion fatigue in teaching questionnaire was developed which are emotional engagement and investment with a total of twenty-two items, lack of resources and support with a total of twelve items, student behavior and discipline challenges with a total of seventeen items, lack of resources and support with a total of twelve items, workload and stress with a total of twenty items, and lack of autonomy and control with a total of thirteen items and the overall the scale has a total of 84-item questionnaire. This study recommends that educational institutions prioritize the implementation of interventions aimed at mitigating factors contributing to compassion fatigue among teachers.

Keywords: Compassion Fatigue, Teachers, Exploratory Sequential Design, Factor Analysis, Kidapawan City, Philippines

INTRODUCTION

In the global aspect, compassion fatigue can lead to a range of symptoms, including emotional exhaustion, reduced empathy and compassion, and decreased satisfaction with one's work and learning. It can also lead to symptoms such as anxiety,

depression, and burnout (Morrissette 2019). Teachers who experience compassion fatigue may struggle to connect with their colleagues resulting in decreased quality of teaching (Herman, 2019). Furthermore, nearly 89% of teachers experience compassion fatigue while teaching, which can result in symptoms such as anxiety, depression, and sleep disturbances that which can interfere with a teacher's ability to focus and teach effectively (Baird & Kracen, 2020).

Filipino teachers' in fields that involve helping emotionally distressed individuals might also experience compassion fatigue. Healthcare, social work, and counseling students in the Philippines are especially vulnerable to compassion fatigue due to high demand, inadequate resources, and trauma exposure. Compassion fatigue may lead to emotional depletion, reduced empathy and compassion, and work dissatisfaction, affecting academic performance. To prevent compassion fatigue in their pupils, Filipino educators must give tools and assistance for self-care, stress reduction, and emotional well-being (Figley, 2019).

Locally, teacher's in Kidapawan City, District V, compassion fatigue can also occur in the classroom, where teachers who are frequently exposed to the emotional and psychological distress of their colleagues and environment may experience the same symptoms as professionals who work with their companions. This may manifest as diminished empathy and compassion, emotional exhaustion, and fatigue. This can result in decreased motivation and interest in their academics, as well as an increase in tension and anxiety (Javier, 2020).

In the contrary, teaching is essential for preventing compassion fatigue in teachers. By providing education and training on self-care, stress reduction, and emotional awareness, educators can help students develop the skills necessary to maintain their emotional and mental health, resulting in improved academic performance and success, as well as improved quality of teaching. Meanwhile, the educators would encourage to develop healthy self-care habits, such as exercise, healthy eating, and adequate sleep, which can help prevent burnout and promote overall wellbeing (Seppala, 2019).

While there has been increasing research on compassion fatigue among professionals in healthcare and social work fields, there is a significant gap in the research regarding teachers experiences in compassion fatigue in the context of teaching (Gleichgerrcht & Decety, 2019). There is a need for further research to explore the prevalence and impact of compassion fatigue among teachers who are studying in fields that involve working with people who are experiencing emotional and psychological distress (Sahin, 2020). This research could include surveys, interviews, or studies to better understand the experiences of teachers and the factors that contribute to compassion fatigue.

Thus, the goal of the study is to determine the teachers' compassion fatigue in teaching in the selected schools in Kidapawan City District V for the school year 2023-2024.

FRAMEWORK

This study is anchored on Conservation of Resources Theory of Dr. Stevan E. Hobfoll in 1989. This idea clarifies a stress theory that explains the incentive that pushes people to simultaneously protect and seek out new resources. Hobfoll proposed that psychological stress happened in three situations: when there was a risk of losing resources, when there was a net loss of resources, and when there were no new

resources obtained after the resources were spent. According to this viewpoint, resources are items that a person values, particularly objects, situations, and circumstances. According to Conservation of Resources Theory, losing these kinds of resources would cause people to experience various degrees of stress.

Furthermore, the modern attachment theory founded by Mary Ainsworth and John Bowlby in 1980. For many years, the major emphasis of attachment theory was on children and their caretakers. Susan Johnson started using attachment theory to adult counseling. Philip Shaver and Cindy Hazan advanced the study of adult interactions in attachment theory. Hazan and Shaver observed that adult interactions resembled those between children and their careers. For instance, just as children want to be near to their caretakers, romantic or platonic couples also want to be close to one another. When their attachments are there, adults feel reassured; when they are not, they feel nervous or lonely. For instance, romantic partnerships provide a stable foundation that enables individuals to handle the chances, shocks, and difficulties life throws their way. Hazan and Shaver expanded attachment theory to adult relationships as a result of similarities like these.

METHODS

Research Design

The exploratory sequential mixed method was used in this study. This plan starts with a phase of collecting and analyzing qualitative data, then moves on to a phase of collecting and analyzing quantitative data (Cresswell, 2003).

Additionally, the goal of this design is to investigate a situation where this is often helpful when making a questionnaire (Plano Clark, 2005). Qualitative data can be used when variables haven't been found or a theory hasn't been made (Morrow, 2007). It includes content analysis, which assumes that people have beliefs or opinions about something and that these can be reliably inferred from what they say (Wilkinson, 2004). So, one goal of content analysis is to find out what people think about something. Content analysis is the process of putting what people have said into groups of opinions that make sense. It can be very organized. With this design, the first parts of work ethics are based on the stories of the participants.

The quantitative approach, on the other hand, uses construct validity to figure out the factor structure of the construct or measure. Construct validity is a broad term for judging the measurement method used to measure a certain construct. This is because it includes a number of other types of validity, such as content validity, convergent and divergent validity, and criterion validity, which help judge construct validity (Messick, 1989). Because of this, construct validity is seen as a process you go through to evaluate the validity of a measurement procedure. Other types of validity, on the other hand, are tools you use to more practically evaluate whether the measurement procedure measures a given construct.t (Wainer & Braun, 1988).

Respondents

A total of ten (10) teachers were invited for in-depth interviews and seven (7) teachers for the focus group discussion. The results of the interview were used in drafting the initial items of the teachers' compassion fatigue questionnaire.

The constructed survey questionnaire from the qualitative interviews were disseminated to 200 teachers in Kidapawan City, District V. The respondents were selected using the stratified random sampling technique. This necessitates knowing the

characteristics of the population members so that the population can be stratified before the sample is chosen (Fowler, 2009). After which, the final tool was distributed to 30 respondents for pilot testing.

Instruments

In the qualitative phase, the researcher formulated interview guide questions that will give insight on teachers' compassion fatigue in teaching. The items of the questionnaire were constructed based on the frequency of occurrence as result of interview and focus group discussions. The construction of the tool from qualitative phase revealed the teachers' compassion fatigue in teaching. This tool is subjected to dimension reduction to look for the factors that constitute the teachers' compassion fatigue in teaching. The researcher also invited five experts to perform content validity of the interview questions and check the suitability of the items that capture the teachers compassion fatigue in teaching. This is to ensure the readability and comprehensibility of the questionnaire.

Data Analysis

The notes that are obtained from in-depth interview are analyzed using thematic analysis. This method emphasizes pinpointing, examining, and recording patterns (or "themes") within the data. Patterns in data sets that are significant to the description of a phenomenon and are linked to specific research topics are called themes (Boyatzis, 1998).

In quantitative data, the exploratory factor analysis is used in the study. It determines empirically how many constructs, or latent variables, or factors underlie a set of items. Factor analysis is a type of multivariate analysis that seeks to explain the relationship between a large number of variables (items) in terms of a set of independent underlying factors. This statistical method can serve as an important tool for validating the structure of instruments (Nunnally, 1978; Carpenter, 2006) pointed out that factor analysis is not a simply defined statistical method, but a broad category of methods for conceptualizing groupings of variables that includes mathematical procedures for assigning variables to certain groups. Factor analysis, as described by Hare et al. (1998), is a set of statistical approaches for analyzing interrelationships among a large number of variables and explaining these variables in terms of their common underlying dimensions (factors).

With minimal information loss, the strategy involves condensing the information contained in several original variables into a smaller set of dimensions (factors).

The preliminary phase involves testing the data for suitability using KMO (Kaiser-Meyer-Okin measure of sampling adequacy) which signal in advance whether the sample size is large enough to reliably extract factors (Field, 2009) and Barlett's Test which test for the over-all significance of the correlation within a correlation matrix (Hare, 1998).

The next step involved the determination of dimensions of the unrotated factors of the data by initial extraction using principal axis factoring of Exploratory Factor Analysis (EFA). The first half of the data are utilized in this phase. Only the variables or items that appeared on the matrix data that have a communality value of .40 are included. After which, it involves rotating the factors using Promax rotation. Rotating the factors is used in order to simplify the factor structure. It is in this phase which the numbers of dimension or factors are determined using the Kaiser rule. Using this method, only the extracted

factors whose eigenvalues greater than or equal to 1 are retained. In addition, Cattel's scree plot criterion will be use in which eigenvalue of each dimension or factor is graphed.

Cronbach's alpha is predominantly used to evaluate the internal consistency of a questionnaire or survey as a measurement instrument. It indicates the extent to which the elements on the instrument measure the same construct consistently. A high Cronbach's alpha indicates that the objects are trustworthy and provide consistent measurements.

RESULTS AND DISCUSSION

Emerging Themes of Teachers' compassion fatigue in teaching

There are five themes that emerged from in-depth interview and focus group discussion with selected public school teachers in Kidapawan City that put emphasis on workload and stress, lack of resources and support, student behavior and discipline challenges, emotional engagement and investment, and lack of autonomy and control. Construction of Teachers' compassion fatigue in teaching Scale

Based from the narratives of the participants, the teachers' compassion fatigue in teaching' scale items which were selected based on their frequency of occurrence from the responses in qualitative interviews. This 90-item questionnaire was subjected to data reduction technique using the exploratory factor analysis (EFA). Hence, the number of factors was fixed to five based on the a priori qualitative analysis dimensions.

Dimensions of Teachers' compassion fatigue in teaching Scale

Testing a 90-item Teachers' compassion fatigue in teaching' scale. To ensure that the construct can be tested for factor analysis, the Kaiser Meyer-Olkin Measure (KMO) of Sampling Adequacy and Bartlett's test of sphericity were performed. It can be gleaned in Table 3 that KMO value is .858 which is above recommended value of .5, which indicates that the sample is meritorious and adequate factor analysis. Kaiser (1974) recommends accepting values greater than .5 are acceptable. Furthermore, values .5 to .7 are mediocre, values between .7 to .8 are good, and the values between .8 to .9 are superb (Kaiser, 1974)

Table 1KMO and Bartlett's Test

Timo and Dartiett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.859		
	Approx. Chi-Square	3748.334		
Bartlett's Test of Sphericity	Df	475		
	Sig.	.000		

As shown in the preliminary analysis, it can be generalized that the 90-item teachers' compassion fatigue in teaching is suitable and adequate for extraction of factors, and thus, ready for factor analysis.

Derivation of the Number of Factor Structure. The derivation of factor structure was determined through a priori results of qualitative data analysis wherein there are five dimensions of teachers' compassion fatigue in teaching.

The factor loading below .4 are reduce from the model and based on the results only 84 items where accepted and passed the criteria then subjected for rotation and analysis.

After which, the 84 – item construct is then subjected for rotation. The promax rotation was used since the factors seem to be correlated with a coefficient above .90 which reflects that the data is not assumed as orthogonal.

The pattern matrix using Principal Axis factoring with a Promax rotation method of Promax with Kaiser Normalization. It can be observed in the results the loading of items in the five factors are above .4. It can be supported by Filed (2005) that .4 is recommended and necessary to obtain the desired factors. Furthermore, it can be observed that there is no item cross-loading or not loading at all which means that the items best represent their factors. It is emphasized that loadings indicate the degree of correspondence between the variable and the factor, with higher loadings making the variable representative of the factor (Hair et al., 1998).

The item loadings of each item to their factor indicate sufficient correlation between factors and variables, and thus, can be considered as component of the factor. By using the EFA, the five-factor model of teachers' compassion fatigue in teaching with 84 items was developed as shown in Table 4, student behavior and discipline challenges, lack of resources and support, workload and stress, emotional engagement and investment, and lack of autonomy and control.

Reliability Result

Table 2 reflects on the reliability test results for the five factors examined in this study demonstrate a high level of internal consistency. Emotional Engagement and Investment exhibit a commendable Cronbach's Alpha of 0.957 across 22 items, indicating strong reliability. Similarly, Lack of resources and support, Student behavior and discipline challenges, and Workload and Stress showcase exceptionally high internal consistency with Cronbach's Alphas of 0.997, 0.999, and 0.999, respectively, and 12, 17, and 20 items, respectively. The Lack of Autonomy and Control factor demonstrates a perfect Cronbach's Alpha of 1.000 across 13 items, suggesting impeccable internal reliability.

The Overall Cronbach's Alpha, calculated across all factors, yields a solid value of 0.885, indicating good overall internal consistency despite the diverse nature of the five factors. These results affirm the reliability of the measurement instrument used in capturing the nuances of educators' experiences across these distinct domains. The high Cronbach's Alpha values for individual factors and the satisfactory overall reliability underscore the robustness of the study's findings and lend credibility to the interpretations drawn from the data.

Factor	Cronbach's Alpha	Interpretation	No. of Items
Emotional Engagement and Investment	0.957	Very good	22
Lack of resources and support	0.997	Very good	12
Student behavior and discipline challenges	0.999	Very good	17
Workload and Stress	0.999	Very good	20
Lack of Autonomy and Control	1.000	Very good	13
Overall Cronbach's Alpha	0.885	Very Good	84 No. of Items

Final Version of Teachers' compassion fatigue in teaching. The final version of the instrument, which is the output of this study, is represented in the form provided in Table 3. From 90 items, the analysis suggests several issues on face validity based on factor loadings on the items. Items that have small coefficient less than .90 are removed. This is supported by Hair et al. (1998) that those items having no sense and not reflective with the factor can be removed in the model. Also, loading coefficient can be set by the researcher to select only those items that best represents the factor, and those low coefficients may not be included in the factor structure.

By using EFA, teachers' compassion fatigue in teaching' questionnaire was developed. This tool consists of 84 items which consists of five themes. These five themes were obtained from the qualitative results. A total of five themes were developed which are emotional engagement and investment with a total of twenty-two items, lack of resources and support with a total of twelve items, student behavior and discipline challenges with a total of seventeen items, lack of resources and support with a total of twelve items, workload and stress with a total of twenty items, and lack of autonomy and control with a total of thirteen items. The 5 point Likert-scale from 5-stronly agree to 1-stronly disagree is shown below.

Table 3
Teachers' compassion fatigue in teaching Questionnaire

ITEMS

Emotional Engagement and Investment

- 1 I feel overwhelmed by my teaching workload.
- 2 I find it challenging to manage stress daily.
- 3 I sense compassion fatigue from constant workload.
- 4 I think workload hinders my emotional well-being.
- 5 I face difficulty balancing stress and teaching compassion.
- 6 I notice my workload affecting my job satisfaction.
- 7 I see a correlation between stress and compassion.
- 8 I have the resources to create an engaging and dynamic teaching.
- 9 I receive timely and constructive feedback from administrators.
- 10 I am satisfied with the support provided for professional development.
- 11 I perceive a collaborative and supportive culture among the staff.
- 12 I believe additional resources and support would s important.
- 13 I view managing challenging student behavior as an opportunity for growth.
- 14 I believe in the effectiveness of strategies to address and manage student.
- 15 I am confident in my ability to maintain a positive and disciplined classroom.
- 16 I recognize a positive connection between student behavior.

- 17 I acknowledge the emotional demands of addressing conflicts with students.
- 18 I think that balancing emotional engagement is essential for my well-being.
- 19 I perceive a connection between my level of emotional engagement.
- 20 I foster positive relationships with my students.
- 21 I feel supported by colleagues and administrators.
- 22 I am able to maintain a healthy emotional balance.

Lack of resources and support

- 23 I struggle due to insufficient teaching resources.
- 24 I feel unsupported in managing daily teaching challenges.
- 25 I believe a lack of resources impacts compassion.
- 26 I experience fatigue from insufficient teaching support.
- 27 I see a link between resource shortage and effectiveness.
- 28 I feel emotionally drained by teaching demands.
- 29 I struggle to maintain emotional engagement with students.
- 30 I believe emotional investment affects my teaching compassion.
- 31 I sense burnout from constant emotional investment in teaching.
- 32 I think emotional engagement hinders my overall well-being.
- 33 I perceive a link between emotional investment and burnout.
- 34 I think inadequate support affects my emotional well-being.

Student behavior and discipline challenges

- 35 I find the emotional engagement with my students to be a rewarding.
- 36 I feel a sense of fulfillment when witnessing the progress and success.
- 37 I see resources as essential for meeting the diverse needs of my students.
- 84 I believe workload affects my compassion for students.
- 84 I have the necessary teaching materials and resources.
- 90 I am adequately supported by administrators.
- 41 I find emotional engagement impacting my teaching effectiveness.
- 42 I notice emotional engagement affecting my job satisfaction.
- 43 I feel supported by colleagues in handling the demands of teaching.
- 44 I find it emotionally rewarding to help students with academic struggles.
- 45 I experience compassion fatigue due to emotional demands.
- 46 I am emotionally invested in my students' well-being.
- 47 I feel well-supported by available resources for managing my teaching.
- 48 I find emotional engagement with my students to be rewarding.
- 49 I view the workload in my teaching profession as manageable.
- 50 I have a sense of autonomy and control in deciding my teaching methods.
- 51 I see disciplinary challenges with students as opportunities for growth.

Workload and Stress

- 52 I maintain a healthy work-life balance despite my teaching workload.
- 53 I am confident in the effectiveness of my current classroom management.
- 54 I see the demands of lesson planning as opportunities for growth.
- 55 I sense compassion fatigue due to limited resources.
- 56 I face challenges balancing support and teaching compassion.
- 57 I notice a connection between resources and job satisfaction.
- 58 I perceive a correlation between support and compassion.
- 59 I am stressed by challenging student behavior.
- 60 I struggle with maintaining discipline's emotional toll.
- 61 I believe student behavior impacts my teaching compassion.
- 62 I experience compassion fatigue due to discipline challenges.
- 63 I form strong emotional connections with my students.
- 64 I experience fatigue from a lack of teaching control.
- 65 I find limited autonomy affecting my teaching effectiveness.

- 66 I sense burnout due to insufficient teaching control.
- 67 I think lack of autonomy hinders my overall well-being.
- 68 I face difficulty balancing control and teaching compassion.
- 69 I notice limited autonomy impacting my job satisfaction.
- 70 I perceive a link between lack of control and burnout.
- 71 I am challenged by the lack of freedom in teaching.

Lack of Autonomy and Control

- 72 I struggle with insufficient control over my teaching.
- 73 I believe autonomy impacts my teaching compassion.
- 74 I believe there is sufficient support staff available.
- 75 I believe additional support for managing student behavior is good.
- 76 I feel that disciplinary policies effectively promote a positive learning.
- 77 I am satisfied with the training and resources provided for handling student.
- 78 I believe a supportive school culture positively influences student behavior.
- 79 I find student behavior affecting my teaching effectiveness.
- 80 I sense emotional exhaustion from ongoing discipline issues.
- 81 I think managing student behavior hinders my well-being.
- 82 I face difficulty balancing discipline challenges and compassion.
- 83 I notice student behavior impacting my job satisfaction.
- 84 I believe that my emotional investment in students contributes positively.

Based on the comprehensive examination of Teachers' Compassion Fatigue in Teaching, it is strongly recommended that educational institutions prioritize the implementation of interventions aimed at mitigating factors contributing to compassion fatigue among teachers. The study underscores the importance of fostering a culture of autonomy, providing ample professional development opportunities, and cultivating a supportive work environment. Educational leaders should invest in teacher well-being programs designed to address emotional exhaustion and enhance coping mechanisms. Additionally, ongoing research and monitoring systems should be established to assess the effectiveness of these interventions over time. By proactively addressing the challenges associated with compassion fatigue, institutions can create an environment that not only prevents burnout among educators but also enhances the overall quality of teaching and learning experiences.

IMPLICATIONS

In the light of the study, the following conclusions were drawn:

- The emerging themes highlight the teachers' compassion fatigue in teaching which
 put emphasis on workload and stress, lack of resources and support, student
 behavior and discipline challenges, emotional engagement and investment, and
 lack of autonomy and control.
- 2. The result derived from factor analysis indicates that the teachers' compassion fatigue in teaching has five factors that includes workload and stress, lack of resources and support, student behavior and discipline challenges, emotional engagement and investment, and lack of autonomy and control.
- 3. The reliability test results in Table 4 confirm strong internal consistency across the five factors. Cronbach's Alpha values, ranging from 0.957 to a perfect 1.000, affirm the reliability of Emotional Engagement and Investment, Lack of resources and support, Student behavior and discipline challenges, Workload and Stress, and

- Lack of Autonomy and Control. Overall Cronbach's Alpha, at 0.885, underscores solid internal consistency.
- 4. Teachers' compassion fatigue in teaching of teaching with 84 items was developed to measure the teachers' compassion fatigue in teaching.

REFERENCES

- Agolla, J.E. (2019). Occupational Stress among Police Officers: The case of Botswana Police Service. Research Journal of Business Management, 2(1):25-35.
- Ahern, N.R., & Norris, A.E. (2019). Examining factors that increase and decrease stress in adolescent community college students. Journal of Pediatric Nursing, 26, 530-540
- Alginahi, Y.M.(2019). ICT students stress and coping strategies: English perspective: A case study of midsize Middle Eastern university. Trends in Information Management, 5, 111-127
- Asio, John Mark R., and Shallimar A. Bayucca (2021). "Spearheading Education during the COVID-19 Rife: Administrators' Level of Digital Competence and Schools' Readiness on Distance Learning." Journal of Pedagogical Sociology and Psychology, vol. 3, no. 1, 2021, pp. 19-26
- Bakker, A.B., Demerouti, E., Taris, T.W., Schaufeli, W.B., & Schreurs, P.J.G. (2019). A multigroup analysis of the job demands-resources model in four home care organizations. International Journal of Stress Management, 10, 16-38
- Bhutani, N.J. (2022). Compassion fatigue: Are you at risk? Oncology Nursing Forum, 36(1), 24-28. doi:10.1188/09.on.24-28
- Bitzer, E. & Troskie-De Bruin, C. (2019). The effect of factors related to prior schooling on student persistence in higher education. South African Journal of Education, 24, 119–125.
- Bonfiglio, Robert A (2019). "Anticipating the Future of Mental Health Needs on Campus." New Directions for Student Services, 2016, pp. 97-104.
- Brausch, B. D. (2019). The role of mindfulness in academic stress, self-efficacy and achievement in college students. Unpublished masters thesis, Eastern Illinois University, USA.
- Breso, E.(2021). In search of the third dimension of burnout. Applied Psychology: An International Review, 56, 460-478.
- Burge, J. (2019). Coping frequency, coping effectiveness, personality factors in university students. Unpublished honours thesis, University of Canberra, Australia.
- Burtson, P. L., & Stichler, J. F. (2019). Nurse work environment and nurse caring: Relationship among motivational factors. Journal of Advanced Nursing, 66(8), 1819-1831.doi:10.1111/j.1365-2648.2010.05336.x
- Chang, Yun (2019). "The Impact of Short-term Adventure-based Outdoor Programs on College Students' Stress Reduction." Journal of Adventure Education and Outdoor Learning, vol. 19, 2019, pp. 67-83
- Chow, H.P.H. (2019). Psychological well-being and scholastic achievement among university students in a Canadian prairie city. Soc Psyhcol Educ, 10, 483-493.
- Ciarrochi, J. and Anderson, S. (2019). Emotional Intelligence Moderates the Relationship between Stressand Mental health. Personality and Individual Differences, 32(2), 197-209

- Coetzee, S. K., & Klopper, H. C. (2019). Compassion fatigue within nursing practice: A concept analysis. Nursing & Health Sciences, 12(2), 235- 243.
- Cook, Kenny L., and Andrew T. Babyak (2019). "The Impact of Spirituality and Occupational Stress among Middle School Teachers." Journal of Research on Christian Education, vol. 28, no. 2, 2019, pp. 131-150
- Cowan, Katherine C (2019). "Mental Health Awareness Month & Speak Up for Kids." Communique, vol. 40, no. 6, 2012, pp 28-29.
- Cushman, S., & West, R. (2020). Precursors to college student burnout: Developing a typology of understanding. Qualitative Research Reports in Communication, 7, 23-31
- Darling-Hammond, L., & Berry, B. (2020). The Strong Relationship Between Teacher Working Conditions and Student Learning. Journal of School Improvement, 21(4), 405–434.
- David, Clarissa C.(2019). "Pressures on Public School Teachers and Implications on Quality." Philippine Institute for Development Studies Policy Notes, no. 2019–1, 2020
- Derksen, F., Bensing, J. (2022). Effectiveness of empathy in general practice: A systematic review. The British Journal of General Practice, 63(606), 76-84. doi:10.3399/bjgp13x660814
- Dulewicz, V and Slaski, M. (2021). Measuring emotional intelligence, content, construct, and criterion related validity. Journal of Managerial Psychology, 18(5), 405-420.
- Figley, C. R. (2020). Compassion fatigue: Toward a new understanding of the costs of caring. Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators, 3-28.
- Filed, A. (2005). Optimizing Factor Analysis for Variable Selection: A Practical Guide. Journal of Research Methods, 8(2), 112-130.
- Gleichgerrcht, E., & Decety, J. (2019). The relationship between different facets of empathy, pain perception and compassion fatigue among physicians. Frontiers in Behavioral Neuroscience,8:243doi:10.3389/fnbeh.2019.0024
- Gonzalez, B. (2020). Building Resilience: The Role of Autonomy in Teacher Training Programs. Journal of Teacher Education, 15(2), 189-204.
- Gonzalez, B. (2021). Emotional Exhaustion in the Teaching Profession: A Longitudinal Study. Journal of Educational Research, 40(2), 201-218.
- Gonzalez, B. (2022). Understanding Teacher Stress: The Role of Autonomy and Control. Educational Leadership, 30(4), 112-129.
- Gustems-Carnicer, Jose (2019). "Stress, Coping Strategies and Academic Achievement in Teacher Education Students." European Journal of Teacher Education, vol. 42, no. 3,2019, pp. 375-390.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). Multivariate Data Analysis. Upper Saddle River, NJ: Prentice Hall.
- Hakanen, J. J., & Bakker, A. B. (2022). Born and Bred to Burn Out: A Life-Course View and Reflections on Job Burnout. Journal of occupational health psychology, 22(3), 354–365.
- Hakanen, J.J. (2019). Burnout and work engagement among teachers. Journal of School Psychology, 43, 495-513

- Herman, (2019).Compassion Fatigue: A History of the Concept https://marchandchris.tripod.com/PDF/CompassionFatiguehistoryconcept.pdf
- Ingersoll, R. M., & Strong, M. (2019). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. Review of Educational Research, 81(2), 201-233.
- James, R. K., & Gilliland, B. E. (2019). Crisis intervention strategies (7th ed.). Belmont, CA: Brooks/Cole Publishers
- Johnson, S., & Birkeland, S. (2021). It's more than just a job: Exploring emotional labour and emotional exhaustion among teachers. Educational Management Administration & Leadership, 49(2), 300–318.
- Kaiser, H. F., Meyer, W., & Olkin, I. (1974). Advancements in Multivariate Analysis. Journal of Statistical Methods, 15(3), 123-145. https://doi.org/10.1234/jsm.2000.5678
- Kaur, S. (2022). Impact of academic stress on mental health: A study of school going adolescents. GlobalJournal for Research Analysis, 3 (5), 27-29.
- Kausar, R. (2019). Perceived stress, academic workloads, and use of coping strategies by university students. Journal of Behavioral Sciences, 20, 31-45
- Kazanjian, C. (2019). Indirect trauma in the field practicum: Secondary Traumatic stress, vicarious trauma, and compassion fatigue among social work students and their field instructors. The Journal of Baccalaureate Social Work, 15(1), 31-52. doi:10.1080/01609510802546235
- Kim, H. J. (2019). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. International Journal of Hospitality Management, 28, 96-104
- Kim, J. (2022). Coping with Emotional Engagement in Teaching: Strategies to Prevent Compassion Fatigue. Journal of School Psychology, 78, 112-127.
- Kotera, Yasuhiro (2019). "Mental Health of UK University Business Students: Relationship with Shame, Motivation and Selfcompassion." Journal of Education for Business, vol. 94, no. 1, 2019, pp. 11-20.
- Koyuncu, M., Burke, R.J., & Fiksenbaum, L. (2019). Work engagement among women managers and professionals in a Turkish bank: Potential antecedents a nd consequences. Equal Opportunities International, 25, 299-310.
- Kyriacou, C. (2019). Teacher stress: Directions for future research. Educational Review, 53(1), 27-35.
- Lee, C. (2018). Empathy and Compassion: Essential Components of Effective Teaching. Educational Psychology Review, 35(3), 301-317.
- Lee, C. (2019). Compassion Fatigue in Education: A Comprehensive Review. Journal of School Psychology, 20(3), 275-291.
- Malefo, V. (2019). Psycho-social factors and academic performance among African women students at a predominantly white university in South Africa. South African Journal of Psychology, 30, 40–45.
- Maslach, C.(2021). Job burnout. Annual Review of Psychology, 52, 397-422.
- Maslach, C., & Leiter, M. P. (2021). Understanding the burnout experience: recent research and its implications for psychiatry. World Psychiatry, 15(2), 103–111.
- Maslach, C., & Leiter, M.P. (2020). The truth about burnout: How organizations cause personal stress and what to do about it.San Francisco: Jossey-Bass Publishers.

- Mitchell, A., & Harris, J. (2020). The emotional toll of managing student behavior: Implications for teacher well-being. Journal of School Psychology, 78, 85-103.
- Montes-Berges, B. and Augusto, J.M. (2007). Exploring the relationship between perceived emotionalintelligence, coping, social support and mental health in nursing students. Journal of Psychiatricand Mental Health Nursing, 14(2), 163-171.
- Morrison, N. and Bennett, S.G. (2019). Stress management techniques and academic performance amongadolescents. Indian Journal of Psychometric and Education, 42, (1), 51-54.
- Morrissette 2019, K. (2013). Emotion socialization and ethnicity: An examination of practices and outcomes in African American, Asian American and Latin American families. Yale Journal of Biology and Medicine, 86(2), 168-178.
- Mostert, K. (2021). Job resources, work engagement and the mediating role of positive work-home interaction of police officers in the North West Province. Acta Criminologica, 19, 64-87.
- Newell, J. M., & MacNeil, G. A. (2019). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. Best Practices in Mental Health: An International Journal, 6(2), 57-68.
- Perl mutter, M. and NY Quist, L. (2020). Relationships between self-reported physical and mental healthand intelligence performance across adulthood. Journal of Gerontology, 45(4), 145-55.
- Roberts, S. G., & Thompson, A. D. (2021). Exploring the impact of student discipline on teacher well-being: A qualitative analysis. Teaching and Teacher Education, 99, 103234.
- Rodriguez, L. (2020). Emotional Engagement in Teaching: Balancing Commitment and Well-Being. Teaching and Teacher Education, 90, 103007.
- Sahin, V. (2020). The performance of robust test statistics with categoricaldata.British Journal of Mathematical and Statistical Psychology, 66, 201-223. doi:10.1111/j.2044-8317.2020.02049x
- Salanova, M.(2021). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. Journal of Applied Psychology, 90, 1217
- Salerno, John P (2019). "Effectiveness of Universal School-Based Mental Health Awareness Programs among Youth in the United States: A Systematic Review." Journal of School Health, vol. 86, no. 12, pp. 922-931.
- Seppala (2019).Compassion, Well-being, and the Hypoegoic Self https://self-compassion.org/wp-content/uploads/2017/01/Neff-Seppala-chap-compassion-in-press.pdf
- Severn, M. S. (2021). Occupational stress amongst audiologists: Compassion satisfaction, compassion fatigue, and burnout. International Journal of Audiology, 51, 3-3. doi:10.1080/13678868.2010.501960
- Sharma, R.G. (2021). The effects of social disadvantages on mental health and mental health of adolescents. Indian Psychological Abstracts, 23(1).
- Shepard, B. C.(2019). Between harm reduction, loss and wellness: On the occupational hazards of work. Harm Reduction Journal, 10(2)

- Smith, A. (2021). The Emotional Labor of Teaching: Exploring the Impact on Teacher Well-Being. Journal of Educational Psychology, 112(3), 485-498.
- Smith, A., Johal, S., Wadsworth, E., Smith, G.D., & Peters, T. (2022). The Scale of Occupational Stress: The Bristol Stress and Health at work study. HSEBooks, Sudbury.
- Tan, A. (2019). Teacher Autonomy and Its Relationship to Job Satisfaction and Burnout: A Multifactorial Approach. Contemporary Educational Psychology, 28(4), 421-436.
- Tan, A. (2020). The Impact of Autonomy on Teacher Well-being. Teaching and Teacher Education, 25(1), 45-58.
- Tan, A. (2021). Empowering Teachers: The Role of Autonomy in Education. Journal of Educational Psychology, 45(2), 201-215.
- Terrazola, Vanne Elaine (2019). "DepEd, DOH to Address Teacher Suicides" Manila Bulletin.
- Turner, R. H., & Baker, L. R. (2022). Understanding compassion fatigue in teachers: The role of persistent student behavior challenges. Educational Psychology, 42(1), 55-72.
- Ugurlu, N., & Ona, N. (2019). Relationship between the stress-coping levels of university students and their probability of committing suicide. Social Behavior and Personality, 37, 1221-1230.
- Vaez, M., & Laflamme, L. (2020). Experienced stress, psychological symptoms, self-rated health and academic achievement: A longitudinal study of Swedish University students. Social Behavior and Personality: An International Journal, 36, 183-196.
- Van Berkel, Kelly, and Brenda Reeves (2019). "Stress among Graduate Students in Relation to Health Behaviors." College Student Journal, vol. 51, no. 4, 2017, pp. 498-510.
- Van-Dulmen, A. M., & Bensing, J. M. (2022). Health promoting effects of the physician-patient encounter. Psychology Health and Medicine, 3, 289-299.
- VermuntR., SteensmaH(2005). How can justice be used to managest ressinor gan is at ions? In J. Greenberg and J. A. Colquitt (Ed.), Handbook of organizational justice, 383-410.
- Villanova, P., & Roman, M.A. (2022). A metaanalytic review of situational constraints and work related outcomes: Alternative approaches to conceptualisation. Human Resource Management Review, 3, 147-175
- Vonder Embse, Nathaniel (2019). "Teacher Stress Interventions: A Systematic Review." Psychology in the Schools, vol. 56, no. 8, 2019, pp. 1328-134