

Empowerment and Mental Health of University Teachers: A Case from Pakistan

Fakhra Aziz & Uzma Quraishi

Department of Education

Lahore College for Women University, Lahore

The present descriptive study investigates the relationship between university teachers' empowerment and their mental health in Pakistan. The research is quantitative in nature. Survey method was applied by using a questionnaire having two subscales for data collection. The study targets the faculty members of 26 public and private universities in Lahore. Simple descriptive statistics, t-test for independent sample, and Pearson correlations were used for data analysis. The results indicate a significant association and direct correlation between both variables. It is seen that low empowerment affects the mental health of university teachers. They feel depressed, restless, low confidence and a decline in their sense of well-being. It has also been revealed that the mental health of teachers in private sector is affected more adversely in comparison with the public sector teachers as a consequence of lack of empowerment. It is inferred that quality education depends on intellectual interactions between teachers and students. These learning communities are possible only when teachers are fully empowered which leads to their good mental health necessary for the purpose of learning.

Key-words: teachers' empowerment, mental health, university teachers

Empowerment is generally understood as a concept of giving authority to others. It is also viewed as enabling people to transfer and share their personal thoughts including authority, information, and professional capacities to demonstrate their commitment and ownership. Empowerment can be considered as the product of the relationship between those who think about themselves as powerful and those who think about themselves as not influential. Researchers have defined empowerment in various ways. This diversity in concept or definition of teachers' empowerment could be challenging for providing a more lucid interpretation of it. In the words of Lee and Nie (2014), it is a complex, dynamic process which deserves greater empirical attention.

Many researchers have assumed that when teachers become intrinsically motivated and satisfied they behave as autonomous professionals who perform their best at work (Gagne & Deci, 2005; Wan, 2005). It has been reported that teachers can be empowered by principals' effective use of their power. Hobbs and Moreland (2009) investigated power sharing between high school principals and teachers. Principals were asked about vision, mission, environment, and improvement strategies of the institution. They presented a four-step process of power sharing between the principal and teachers: will for sharing, implementation of principal's vision, cooperation, and roles unified between principal and teacher. Furthermore, Hobbs and Moreland (2009) examined six aspects of empowerment including decision making, professional progress, prestige, self-efficacy, independence, and influence.

Researches indicate the decision-making as one of the most effective way of empowering teachers. Decision making discusses teachers' involvement in planning, coordinating, controlling, implementing, examinations, measurement and assessment within institutional context. Coble (2011) observed that, when staff feel the importance of their efforts, they think about autonomy, take part

in decision making and exhibit empowered behaviors for effectiveness. Hobbs and Moreland (2009) elaborated that involvement in decision making directly affects relationship between principals and teachers and develop mutual respect and trust. Mulford (2001) concluded that teachers' positive attitude about decision making process leads to a higher degree of inspiration. He further stated that in secondary schools where teachers observed shared and supportive decision making and get opportunities for contribution, they will perceive more positively about their school, students, other teachers and their own performance.

Teachers' Professional growth is primarily referred to as the opportunities for teachers to learn about their occupation and organizations. Coble (2011), Tischler (2004) and Terry (1995) have documented teacher professional development as authoritative. Murray (2010) wrote that to be empowered is one of the main reasons to pursue professional development. Stacy (2013) asserted that teacher empowerment can surface from the current system through teacher-led professional development which constructs opportunities to encourage professional autonomy, stresses professional judgment, and provides space to validate teacher voices, all essential components of teacher empowerment. Short and Rinehart (1992) reported decision making, grip over daily routine, instructional skills, and chances for improvement to be empowering features of women's professional life in teaching. By providing professional development opportunities, heads can win motivated, devoted and committed teachers.

Literature indicates that status is an important aspect of teacher empowerment which is a sense of esteem and respect by pupils, parents, civic society, peers, and seniors to the teaching occupation (Lintner, 2008). Short and Johnson, (1994) say that teacher successes demand celebration to boost status among the colleagues and to develop a sense of accepted status. Wang (2011) indicated that self-efficacy is teachers' own perception about their ability to share their competencies and information with learners to facilitate their learning. Bandura (1997) identified this construct as "beliefs in one's capabilities to establish and perform actions required to produce given skills". Hemric (2010) investigated the perceived level of self-efficacy in elementary teachers. He reported that when principles offer teachers to control and handle situations, it enhance their performance, develop trust and improve expertise, collegiality, and relationships among faculty members, which may provide them

opportunities to build self-efficacy. Short and Johnson (1994) asserted that improvement in teacher effectiveness become important when highly self-efficacious teachers had power to control their job.

Authority has also been reported as a factor for teachers' empowerment. Mayfield and Mayer (2006) focused on the importance of authority in empowering teachers. Designation lacking authority means developing rules without having power to implement. However it could be argued that authority can be problematic and challenging if is without defined agreed boundaries. It requires sufficient time, logical thinking, learning and significant action can be uplifted by executing authority in a responsible manner. Entwistle (2009); McNally and Blake (2009) and James and Biesta (2007) endorsed the positive impact of empowerment on teachers' performance. They considered empowered teachers as the foundation of an energetic institutional technology. They with high level of task motivation, greater understanding, and strong organizational commitment take the institutes to heights. They eventually get committed to organizational objectives and then go an extra mile to exhibit extra role behaviors (Ahmad, Malik, Sajjad & Hyder, 2014). Ryan and Deci (2000) suggested self-determination as an essential part of power. Conger and Kanungo (1988) said that major changes or transitions in an organization can cause employees to experience powerlessness. Glasman, Cibulka and Ashby (2000) were of the view that by consolidating the self-evaluative process within the universities, teachers may maintain power, thereby satisfying their need for self-determination.

Key positions in universities start with expanding teachers' professional roles in everyday actions that make their jobs more satisfying and less problematic. This enables them to take more responsibilities regarding university-improvement as they become ready to handle them. A high quality teaching personnel is the basis of a flourishing structure of education (Guardian, 2001). A healthy teacher-student relationship is the core of a learning process. (Giles, 2008). An empowered and efficient teacher is therefore a major requirement for a strong system of education. To elevate teachers' status, it is necessary to comprehend the factors allied with institutional status and maintenance. Job satisfaction is not only contentment with profession, but profession itself is important. Teachers' job satisfaction and serenity have positive influence over students' learning.

Lack of empowerment causes poor performance. Teachers just follow the instructions. They adapt prescribed curriculum, follow strict daily schedule, have no involvement in decision making, and observe less self-efficacy, less autonomy, less motivation and less job satisfaction. When they feel themselves powerless during their job performance, they become stressed and mentally upset which leads to poor mental health.

Mental health is referred to as a level of psychological well-being. According to Princeton University (2010), the "psychological state of someone who is working at a satisfactory level of emotional and behavioral adjustment", having a good mental health stimulates an individual's ability to enjoy life and make a balance between life activities and efforts to avoid psychological inflexibility. World Health Organization (2001) reports mental health as "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's rational and emotional potential, among others" (p.297). This report further demonstrates that the well-being of an individual is involved in the realization of his or her abilities, managing common stresses of life, dynamic work and input to society. Nearly half (50%) of the world's population have low self-esteem, weak relationships among themselves and low competencies at homes and work places due to mental illness (WHO, 2001). Good mental health can boost one's life, while poor mental health can push someone to a dissatisfied

life. There is growing evidence which shows that emotional abilities are connected with pro-social behaviors such as stress management and physical health (Richards, Campania, & Muse-Burke, 2010).

Mental and physical health cannot exist alone. Actually mental, physical and social functioning are symbiotic. Moreover, wellbeing and sickness may co-exist. Mental, social and behavioral health issues have been reported to be highly influential for an individual's behavior and well-being. The mental health of each individual is affected by individual factors and experiences, collaborations, societal structures and ethnic standards. Lahtinen (1999) indicated that mental health is influenced by everyday life experiences, in homes and institutions, outside the house and at job place. The mental health of a person affects the health of the whole society. They further linked hopelessness, demoralization, addictions, distress, anger, depression, hostility and violence back to these experiences and problems. These are also the parameters of lack of empowerment. Hoole and Vermeulen (2003) focused on relevance of employees' empowerment to their physical and mental well-being.

Quality of teachers directly impact students' learning in universities. (Entwistle, 2009; McNally & Blake, 2009; James & Biesta, 2007). Darling-Hammond and Rothman (2011) explained that high quality teachers are those who are well equipped with content knowledge and pedagogical skills, are continuous learners, and are devoted to school's success and upgrading. It is true for university teachers too. Research shows that empowerment is a significant factor in determining teachers' quality.

Rationale

Teachers and their performance is the most identified factor behind poor quality of education. (Hoodbhoj, 1996; Hussain, Sarwar, Khan, & Khan, 2010). Teachers' performance depends on their competencies, motivation, attitude, job satisfaction and their professional commitment. All these variables have been investigated via both qualitative and quantitative approaches. To greater or lesser extent, these variables are reflections of their mental health. On the other hand anxiety, stress, depression, anger, negative attitude, and weak teacher-student relationship have been reported as a product of lack of empowerment. However, there has been dearth of research in exploring and investigating the phenomenon of mental health and teachers' empowerment. Therefore, in considering the issue of quality in education in Pakistani universities, this study explores the correlation of teachers' empowerment and their mental health.

Objectives

- To develop an insight about teachers' empowerment and their mental health in Pakistani universities
- To explore the relationship of teachers' empowerment with their mental health

Research Questions

1. What is the current level of teachers' empowerment in Pakistani Universities?
2. Is there any difference between the empowerment level of public and private university teachers?
3. Is teachers' empowerment correlated with their mental health?

Method

For this descriptive research, the survey method was selected to collect data.

Sample

The population of the study was all the teachers employed in public and private universities of Lahore in Pakistan. Lahore being an educational hub was selected purposefully. There were 26 universities in Lahore, 12 public and 14 private HEC recognized universities. Fifty percent sample size was calculated. By simple random sampling technique 13 universities were selected. Further research questionnaires were distributed among 250 faculty members. Among them 125 were from public universities and 125 were from private universities. Response rate was 92%.

Instruments

Data regarding teachers' empowerment and their mental health was collected with the help of the University Teacher Empowerment and Mental Health Scale. The scale was a blend of two separate scales. It consisted of two subscales. The empowerment scale was a modified form of The School Participant Empowerment Scale designed by Short and Rinehart (1992). All the 38 statements were distributed among six categories: decision making, professional growth, status, self-efficacy, independence, and influence. Ten statements were related to decision making while six statements were related to each construct of influence, self-efficacy, professional growth, and Status. Remaining four statements were about independence.

Second sub scale was modified form of The Warwick-Edinburgh Mental Well-being Scale (WEMWBS). It consisted of 14 statements. All were positive statements and were distributed among five indicators of mental health namely self-efficacy, life satisfaction, optimistic, reassurance and happiness. Teachers had to respond on a five point Likert scale. A pilot-test was conducted to check the reliability and validity of questionnaire. Reliability was found to be 0.79 while experts in the area judged the validity and found it to be appropriate.

First part of the instrument was related to demographics. There were 159 lecturers, 37 were assistant professors, 26 associate professors and 8 were professors - 114 were from public universities and 116 were from private universities. The second part consisted of two sub-scales related to teachers' empowerment and their mental health. Teachers responded on a 5 point Likert scale ranging from 1.00 to 5.00 (strongly disagree to strongly agree) to provide an overall level of empowerment and their mental health.

Procedure

Prior to data collection, informed consent was obtained from the participants. The participants were informed about the purpose of the research and confidentiality of their responses was ensured.

Table 2
Teachers' Empowerment Scores of Public Along With Private University Teachers (N =234)

Groups	n	Mean	SD	df	t-value	p	d
Public	125	91.33	9.81	231	3.65	.000*	.406 *
Private	125	87.55	8.59				

* $p < .05$

Note: 16 cases were missing data and were excluded from the analysis

To determine the current level of empowerment and mental health, simple descriptive statistics were used. T-test was applied to find out the difference between public and private university teachers in terms of empowerment. Pearson correlation coefficient was carried out to examine the relation of various dimensions of empowerment with mental health. In this study, Teachers empowerment and their mental health were considered as independent and dependent variables with significance level of $P < 0.05$.

A significant association between teachers' empowerment and their mental health was depicted by Chi-square values.

Results

Research Question 1

What is the current level of teachers' empowerment in Pakistani universities?

Table 1

Descriptive Statistics: Teachers' Empowerment level based on their perceptions

Subscales	N	Mean	SD
Decision making	230	2.9	7.38
Professional Growth	230	3.0	1.49
Prestige	230	3.1	1.39
Self-Efficacy	230	4.1	3.28
Independence	230	3.0	2.68
Influence	230	3.0	4.33
Overall	230	3.1	3.42

Research question 1 was related to determine the empowerment level of teachers. Teachers were asked to respond on a 5 - point Likert scale ranging from strongly disagree to strongly agree to provide an overall perception of empowerment. A higher score represents a higher degree to which teachers perceive themselves to fit at that empowerment subscale. Mean scores for teacher empowerment range from $M = 4.1$ to 2.9, self-efficacy, prestige, influence, independence, and decision making, respectively. The data reveal that generally teachers perceive themselves as high on self-efficacy. It can be concluded that in Pakistani universities, teachers are empowered, although to an average level.

Research Question II

Is there any difference between empowerment level of public and private university teachers?

Levene's Test for Equality of Variance was applied. After authenticating the assumption of homogeneity of variance, the t-test was used to find the significant difference. Table 2 shows that a significant difference between public university teachers ($M = 91.33$, $SD = 9.81$) and private university teachers ($M = 87.55$, $SD = 8.59$), $t(230) = 3.65$ has been revealed by data analysis. This

finding answers the research question 2. It can be concluded that teachers in public universities are more empowered as compared to teachers in private universities.

Research Question III

Is there any relationship between teachers' empowerment and their mental health?

Chi-square values in Table 3 shows a significant association between teachers empowerment and their mental health at 5% level

Table 4

Inter-Correlation among Mental Health Indicators and Teacher Empowerment Subscales (N =236)

Sub scale	SE	LS	Optimist	Anxiety	Depression
Decision Making	0.5*	0.6*	0 .38	0.29	0.31
Professional Growth	0.14	0.01	-0.04	0.08	0 .14
Prestige	0.5*	0.76*	0 .48*	0.39*	0 .27
Efficacy	0.01	0 .15	0 .13	0 .20	-0.07
Independence	0.37	0 .59*	0 .34	0 .40*	0.49*
Influence	0.4*	0 .04	0.47*	0,20	0.40*

p<.05

Note: 14 cases were missing data and were excluded from the analysis; SE=Self-esteem, LS=Life satisfaction

Table 4 shows pearson correlation coefficients analysis of the six teachers empowerment subscales and five mental health indicators have predicted six moderate to very strong influences between the set of variables identified in Table 4. Specifically, the two strongest influence changes exist in the independence sub scale of teachers' empowerment and low self-efficacy and depression indicators of mental health. Overall, independence or autonomy subscale has the largest coefficients in relation to all empowerment subscales indicating that there is a significant relationship among independence, self-efficacy and depression. Both professional growth and self-esteem had very weak influence on any mental health indicator.

Table 5 shows a significant positive correlation (*r* = .31**) between empowerment and mental health. This indicates that low level of empowerment leads to poor mental health in university teachers.

In short, results have revealed that teachers in Pakistani universities experience moderate level of empowerment. Public university teachers are more empowered than private university teachers. Empowerment is significantly associated with mental health of teachers. Less empowered teachers suffer from weak mental health. A significant relationship has

Table 5

Correlation of Dependent Variable Mental Health with Empowerment (N = 236)

Variable	Empowerment
<i>Mental health</i>	.31**

P<.01

Note: 14 cases were missing data and were excluded from the analysis

appeared among independence, self-efficacy and depression while both professional growth and self-esteem have a very weak influence on any mental health indicator.

Discussion

Empowerment has its roots in education (Freire, 2004). It does not mean to give power. Instead, it implies that someone releases

of significant (*P*<0.05). It can be concluded that less empowered teachers suffer from weak mental health and vice versa.

Table 3

Chi-Square Test for Association between Empowerment and Mental Health (N = 230)

Pearson Chi-Square	df	χ^2	<i>p</i>
	4	648.219	.000
Total	230		

Note: 20 cases were missing data and were excluded from the analysis

the power, information, and inspiration they already possess. An absence of power significantly affects individuals and organizations. The present study reports that teachers in Pakistani universities are less empowered and there is a significant correlation and association between empowerment and teachers' mental health. Interestingly, there have been a number of research studies exploring the effects of empowerment on teachers' motivation, anxiety, depression, and wellbeing (Aliakbari & Amoli, 2016; Ahmad et al., 2014; Pearson & Moomaw, 2005).

Research question one is related to finding out the empowerment level of university teachers. Teachers view that their most empowered dimensions is self-efficacy as compared to prestige, influence, professional growth, independence, and decision making. On the basis of these results it can be concluded that teachers think their highest empowerment level lies in their pedagogical competencies to help students learn. It is important to indicate that 50% public university teachers have a higher level of empowerment. These teachers were either lecturers, assistant professors, associate professors or professors and their academic and professional knowledge and experiences are different. Public university teachers are more self-efficacious than private university teachers which may be due to more opportunities of enhancing their skills, training and to stay abreast of innovations. Short and Johnson (1994) recognize the importance of improving teacher effectiveness, as more self -efficacious teachers were those who possess power to control their jobs.

Interestingly, there have been a number of research studies exploring the effects of empowerment on teachers' motivation, anxiety, depression, and wellbeing. Results of present study align with already conducted researches pinpointing that self-efficacy is linked to rising thinking of empowerment. Dvir, Eden, Avolio, and Shamir (2002) along with Avey, Hughes, Norman, and Luthans, (2008) found a significant association between self-efficacy and empowerment and both viewed that empowerment has a significant subscale of self-efficacy. Kark, Shamir, and Chen's (2003) research study identified that transformational leadership behaviors raised self-efficacy and connected it to the self-concept of employees, so that the value become associated with belief system.

The present results are similar to the conclusions of Hobbs and

Moreland (2009) who found empowerment exists in the phases of initiating, increasing, and sustaining teachers. In the last phase, sustaining teachers feel a high level of self-efficacy.

Regarding association between teachers' empowerment and their mental health, there is no research based evidence which supports or contradicts the present findings but there are research studies which indirectly can be related to it such as correlation of job satisfaction and motivation, professional commitment and job performance, stress and teachers' performance, teachers' depression and burnout (Elder, Nidich, Moriarty & Randi, 2014).

This study highlights the current level of teachers' empowerment in Pakistani universities and its relationship with their mental health. In this study, the dimensions of empowerment have been investigated in relation with different parameters of mental health.

There is considerable evidence offered by psychologists and social scientists, recommending that ignoring empowerment results in the decline of the mental health of teachers. Thus, public policies aimed at improving quality of education should account for the lack of teachers' empowerment at the cost of mental health. Moreover, public policy should be mindful of the support needed by teachers who observe poor mental health due to less empowerment.

The main purpose of this study was to explore and investigate the relationship between teachers' empowerment and mental health in selected universities. The results reveal that there is a significant relationship, highlighting the need for policy shift and practice direction, especially for university leadership. Teachers are at the core of quality education, the teachers, deans, directors and heads have to learn to acknowledge the budding within every teacher, i.e. empowerment. Empowering teachers is an important factor in developing good mutual relationships based on respect, common purpose, group decision making, and uncompetitive association that affects institute effectiveness. If the teachers do not come to be owners of their own university, all policy, academic, curriculum, pedagogical and structural reforms will be ineffective in the long term.

The universities need to establish inclusive and participative mechanisms for decision making. Teachers as active participants in the decision making will help the leadership take appropriate actions and practice to help empower not just teacher but also students.

Furthermore, teacher-student centered approach in leadership—that is a combination of transformational and transactional leadership styles are useful addressing both organizational and individual requirements. Tracing of university leadership in inclusive and participative structures and practice of administration are essential.

More autonomy to teachers and students i.e. teaching and learning combined with appropriate professional development and capacity building of teachers in life skills, content knowledge and teaching competencies is much required to establish practices that are helpful in creating conducive environment for teachers and learners. Health endurance, profound counselling and facilities for teaching and research are useful strategies to improve work conditions for teacher empowerment.

References

- Ahmad, M.S., Malik, M.I., Sajjad, M., Hyder, S., Hussain, S., & Ahmed, J. (2014). Linking teacher empowerment with organizational commitment, professional commitment and organizational citizenship behavior. *Life Science Journal*, 11(4), 105-108.
- Aliakbari, M., & Amoli, F. (2016). The effects of teacher empowerment on teacher commitment and student achievement. *Mediterranean Journal of Social Sciences*, 7(4). Doi:10.5901/mjss.2016.v7n4p649
- Avey, J. B., Hughes, L. W., Norman, S. M., & Luthans, K.W. (2008). Using positivity, transformational leadership and empowerment to combat employee negativity. *Leadership & Organization Development Journal*, 29(2), 110-126.
- Biesta, G. (2007). Why 'what works' won't work: Evidence-based practice and the democratic deficit of educational research. *Educational Theory*, 57(1), 1-22.
- Bandura, A. (1997). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215
- Coble, B. S. (2011). A mixed method approach to understanding teacher empowerment in Georgia schools after implementation of the No Child Left Behind legislation. Available from *ProQuest Dissertations and Theses database*. (UMI No. 3431951)
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13, 471-482.
- Copp, C. R. & Pfeiffer W. F. (2003). *Staff empowerment: A prescription for success*. Retrieved from <http://xnet.kp.org/permanentejournal/fall03/staff.html>
- Darling, H. L. (2006). No child left behind and high school reform. *Harvard Educational Review*, 76(4), 642-667.
- Darling – Hammond, L., & Rothman, R. (2011). *Teacher and leader effectiveness in high performing education system* (ED517673). Washington, US: Alliance for Excellent Education. Retrieved from <http://www.alle4ed.org>.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4), 735-744.
- Entwistle, N. (2009). Teaching for understanding at university: Deep approaches and distinctive ways of thinking. *Basingstoke*: Palgrave Macmillan.
- Elder, C., Nidich, S., Moriarty, F., & Nidich, R. (2014). Effect of transcendental meditation on employee stress, depression, and burnout: A randomized controlled study. *The Permanente Journal*, 18 (1), 19-23.
- Freire, P. (2004). *Pedagogy of the oppressed*. New York: The Continuum International Publishing Group, Inc.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Organizational Behavior*, 26(4) 331-362. doi:10.1002/job.322.
- Giles, D. (2008). *Exploring the teacher-student relationship in teacher education: A hermeneutic phenomenological inquiry* (Unpublished Doctoral dissertation). Auckland University of Technology, New Zealand. Available at <http://aut.researchgateway.ac.nz/bitstream/handle>
- Glasman, N., Cibulka, J., & Ashby, D. (2000). Program self-evaluation for continuous improvement. *Educational Administration Quarterly*, 38(2), 257-288. <https://doi.org/10.1177/0013161X02382008>
- Hemric, M., Schools, W. C., Boone, N., Boiling, S. N. & Shellman, D. (2010). Correlations between perceived teacher empowerment and perceived sense of teacher self-efficacy. *Journal of Scholarship and Practice*, 7(1), 37-50.
- Hobbs, M., & Moreland, A. (2009). *Growth of empowerment in career science teachers: Implications for professional development*. Paper presented at the International Conference

- of the Association for Science Teacher Education, Hartford, CT.
- Holland, K. (2012). *Effects of unemployment on health and mental health based on gender*. Unpublished Master research paper). St. Catherine University. Retrieved from <http://sophia.stkate.edu/cgi>
- Hoodbhoy, P., (1996). *On Reforming Science Education In Pakistani Universities. Paper presented at the International Seminar on Higher Education, November 20-21, 1996 at The Aga Khan University, Karachi*. Retrieved from www.chowk.com/views/--/reforming-pakistan-s-universities-1
- Hussain, S. (2008). *Sustained impact of national academy of higher education's faculty development program in Pakistan*. Retrieved from <http://eprints.hec.gov.pk/3715/1/final.report.pdf>.
- Hussain, S., Sarwar, M., Khan, N., & Khan, I. (2010). Faculty development program for university teachers: Trainee's perception of success. *European Journal of Scientific Research*, 44 (2), 253-257.
- Hobbs, M., & Moreland, A. (2009). *Growth of empowerment in career science teachers: Implications for professional development*. Paper presented at the International Conference of the Association for Science Teacher Education, Hartford, CT.
- Hoole, C., & Vermeulen, L. (2003). Job satisfaction among South African Aircraft Pilots. *South African Journal of Industrial Psychology*, 29(1), 52-57.
- James, D., & Biesta, G. (2007). *Improving learning cultures in further education*. London, UK: Routledge
- Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational Leadership: Empowerment and dependency. *Journal of Applied Psychology*, 88(2), 246.
- Keedy, J. L., & Finch, A. M. (1994). Examining teacher-principal empowerment: An analysis of power. *Journal of Research & Development in Education*, 27(3), 162-175.
- Lahtinen, E. (1999). *Framework for promoting mental health in Europe*. Hamina, (STAKES) National Research and Development Centre for Welfare and Health, Ministry of Social Affairs and Health, Finland. Retrieved 15 April 2016.
- Lightfoot, S. (1986). On goodness of schools: Themes of empowerment. *Peabody Journal of Education*, 63(3), 9-28.
- Lintner, J. D. (2008). *The relationship between perceived teacher empowerment and principal use of power*. Available from ProQuest and Theses database. (UMI No.3317329)
- Lee, A. N., & Nie, Y. (2014). Understanding teacher empowerment: Teachers' perceptions of principal's and immediate supervisor's empowering behaviors, psychological empowerment and work-related outcomes. *Teaching and Teacher Education*, 41, 67-79.
- McNally, J. & Blake, A. (2009). *Improving Learning in a Professional Context*. London: Routledge
- Melenyzer, B. J. (1990). *Teacher empowerment: The discourse, meanings and social actions of teachers*. Paper presented at the Annual Conference of the National Council of States on In-service Education, Orlando, FL.
- Mulford, B. (2003). *School leaders: Changing roles and impact on teacher and school effectiveness*. Paper presented to the Education and Training Policy Division, OECD, for the Activity Attracting, Developing and Retraining Effective Teachers, Adelaide, SA. Princeton University
- Murray, A. (2010). *Empowering Teachers through Professional Development*. Retrieved from https://americanenglish.state.gov/files/ae/resource_files/10-48-1-b.pdf
- Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment and professionalism. *Educational Research Quarterly*, 29(1), 37.
- Ribbins, P. (2001). Leadership effects and the effectiveness and improvement of schools. In Kam-Cheung, W., & Evers C. W. (Eds.). *Leadership for Quality Schooling: International Perspectives*. Routledge Falmer: London.
- Rice, E. M., & Schneider, G. T. (1994). A decade of teacher empowerment: An empirical analysis of teacher involvement in decision making, 1980-1991. *Journal of Educational Administration*, 32(1), 43-58.
- Richards, K., Campana, C., Muse-Burke, J. (2010). Self-care and well-being in mental health professionals: The mediating effects of self-awareness and mindfulness. *Journal of Mental Health Counseling* 32(3), 247-264. doi:10.17744/mehc.32.3.0n31v88304423806
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78
- Short, P. M., & Johnson, P. E. (1994). Exploring the links among teacher empowerment, leader power, and conflict. *Education*, 114(4), 581 - 593.
- Short, P. M., & Rinehart, J. S. (1992). School participant empowerment scale: Assessment of level of empowerment within the school environment. *Educational and Psychological Measurement* 52. 951-961.
- Stacy, M. (2013). Teacher-led professional development: Empowering teachers as self-advocates, *The Georgia Social Studies Journal*, 3(1), 40-49
- Terry, P. M. (1995). Empowering teachers as leaders. *National Forum Journal*, 10E(3), 1-7.
- World Health Organization. (2001). Mental health: new understanding, new hope. Retrieved from <http://www.who.int/whr/2001/en/>
- Thomas, T., Schermerhorn, J. R., & Dienhart, J. W. (2004). Strategic leadership of ethical behavior in business. *Academy of Management Executive*, 18(2), 56-66.
- Tischler, I. F. (2004). How does leadership transition influence a sustained school change process? *Journal of Business Ethics*, 90(4), 533-547.
- Vickers, M. H. (2003). *Association on employment practices and principles*. Paper presented at the 12th Annual International Conference, Fort Lauderdale Beach, FL.
- Wan, E. (2005). Teacher empowerment: Concepts, strategies, and implications of schools in Hong Kong. *Teachers College Record*, 107(4), 842-861.
- Wang, W. (2011). *The impact of volitional feedback on learners' self-efficacy and course satisfaction in a college assignment system* (unpublished doctoral dissertation). Virginia Polytechnic Institute and State University. Retrieved from <http://scholar.lib.vt.edu/theses/available/etd>