

WORKLOAD AND WORKPLACE WELL-BEING OF TEACHERS: THEIR IMPLICATIONS ON NATIONAL ACHIEVEMENT TEST (NAT) PERFORMANCE OF GRADE 6 AND 10 LEARNERS

^{1*}Denis A. Tan, ²Carmela L Balasico, ³Cherly C. Cordova, ⁴Rhesa T. Hinampas, ⁵Francisco Isidro L. Salvador
^{1,2,3,4,5}Faculty, College of Education, Central Mindanao University, Musuan, Maramag, Bukidnon, Philippines

*Correspondence Email: denistan@cmu.edu.ph

ABSTRACT: Teachers' workload and workplace well-being are frequently associated with student or pupil academic achievement. An investigation was conducted to determine the academic achievement of Grade 6 pupils and Grade 10 students in the National Achievement Test (NAT), the workload and well-being of their teachers, and their association. Descriptive correlational research was employed utilizing the quantitative method of research using the existing data in the DepEd schools on the demographic profile of teachers and their workload as to their academic and ancillary functions in the Division of Bukidnon. Results showed that The Grade 10 and Grade 6 learners did not pass the mean percentage scores in the 5 subject areas of the NAT. Their performance is below mastery level. The majority of the teachers have exceeded the prescribed optimum weekly workload (prescribed in DM 291, s. 2008). Overall, the teachers show a satisfactory state of physical safety, mental health, professional development, and personal welfare within the workplace. Further, they demonstrate a very satisfactory state in the communal dimension, while satisfactory in the personal and environmental dimensions. The workload of teachers has no direct association with the NAT performance of learners. The workplace well-being of high school teachers does not have a direct connection with the NAT performance of Grade 10 learners. The environmental component of the workplace well-being of elementary teachers has a direct bearing on the NAT performance of Grade 6 learners. However, the personal and communal component of workplace well-being has no association with the Grade 6 learners' NAT performance.

Keywords: NAT Performance, Workload, Workplace well-being, Grade 6 and 10 Learners

1. INTRODUCTION

Education is viewed as the primary tool for advancing society and the country as a whole. Given education's critical role in our society, it's reasonable to assert that it should be reinforced throughout life, as the nation's competitive workforce and cohesive citizenry rely on it [1]. However, the results of the National Achievement Test (NAT) over the last three years have revealed an appalling situation in the country's educational system, with Filipino learners classified as having "low mastery" or "low proficiency" descriptive levels in Science, Mathematics, and English. The findings indicated that the learners' performance has been steadily deteriorating. Additionally, the 2018 Program for International Student Assessment (PISA) results revealed that Filipino students ranked last in reading comprehension and second-last in mathematics and science among 79 participating countries. With these troubling results from both local and international student assessments, the Department of Education, through Secretary Briones, underscored the critical need to focus more intensely on the quality of basic education.

Education quality is comprised of numerous components. Quality education is the "primary indicator of an education's effectiveness and the most vulnerable attribute that suffers when the system fails." A critical aspect of quality is the teacher's quality [2]. Numerous studies demonstrate that teacher quality has a significant impact on student performance [3]. Because educators are at the heart of every educational system, the quality of educators in each school system reflects and influences the overall quality of the school system and the potential of its students [4, 5, 6, 7]. Thus, as frontline educators, teachers are the primary determinants of educational quality and are expected to be effective and committed. Hanushek and Rivkin [8] define effective teachers as those who consistently achieve high levels of learning the development of a teacher development initiative that will benefit public school teachers.

growth from their students, whereas ineffective teachers produce low levels of learning growth. As a result, a good teacher is considered an effective teacher [9].

In this light, Teachers' Dignity Coalition (TDC) Chairperson Benjo Basas stated that quality education equates to quality teachers. Thus, if the government wishes to improve the quality of education in the country, it should prioritize the welfare of its teachers. Teachers' primary and unquestionable role in the classroom is to facilitate the teaching-learning process. Additionally, they fulfill a variety of other roles within the school. Massive teacher workloads create an abundance of demands and challenges, making it impossible to maintain a healthy work-life balance. This can have a detrimental effect on the teacher's well-being [10, 11].

Teachers are required by the Magna Carta for Public School Teachers to devote six hours per day to actual teaching. According to a recent study conducted by the Philippine Institute for Development Studies (PIDS), teachers' actual teaching hours have been dwindling due to a heavy workload that includes not only teaching but also administrative tasks such as paperwork, training and seminars, and tasks related to budget, disaster response, and health, among others. The study recommended that the Department of Education (DepEd) conduct a workload review of teachers in order to improve the quality of instruction. Teachers in public schools have repeatedly complained about the "excessive" paperwork and systems they were required to complete. Teachers have stated that the increased workload took time away from caring for their families, themselves, and teaching.

Given the critical role teachers play in engaging students and increasing academic achievement, it is necessary to ascertain the causal relationship between teacher workload and well-being and work performance. The study's findings will aid in

The study's underlying framework is founded on the concepts of workload and teacher well-being. According to Amey [12], workload, well-being, and productivity are complex yet critical aspects of teachers' lives. Traditionally, the workload has been defined as the teaching load and the amount of time spent on instruction, institutional services such as administrative duties, co-teacher mentoring, and student advisement. Teachers' workloads may obstruct their ability to be happy and productive, or any combination of the two. Thus, workload refers to the average number of hours worked per week and the number of preparations for teaching. According to Meilgrom et al. [13], adequate time allocated to teaching preparations reduces teachers' stress and enables them to perform at their best.

Bruggen [13] asserts that workload is one of several predictors of increased fatigue, which results in a change in performance. Similarly, he asserted that the highest quality of performance occurs at moderate levels of workload, arguing against a trade-off between quantity and quality. As a result, Fan and Smith [14] affirm that workload has a direct effect on performance and that organizations must balance workloads in order to maximize employee performance. Thus, the workload of teachers is described in this study in terms of their academic and non-academic functions.

Similarly, it is suggested that individuals and groups with higher levels of well-being perform better at work than those with lower levels of well-being [15]. Through what teachers do (teach academic subjects, instill social values, and nurture students), and how they do it, wellbeing is inextricably linked to the larger network of the teaching profession (responsibly and safely).

Teachers' wellness or well-being has received increased attention in every workplace over the last decades, as a result of a significant increase in sick leave and job quitting among teachers in diverse countries and cultures. Indeed, it is widely accepted in the literature that teaching is a difficult profession, demanding, prone to burnout, exposed to stress, and, more broadly, with a high breakdown rate [16]. According to Brasfield, Lancaster, and Xu [17], wellness can act as a buffer against teacher burnout and stress. The findings indicate that there are significant correlations between reported burnout and indicators of wellness and breakdown.

The majority of studies have also focused on increasing students' performance by introducing contemporary teaching strategies to enhance students' learning [18-24], improving assessment techniques [25-28], developing instructional materials [29-30], understanding teachers' skills and competencies [31-33], investigating teachers' awareness, perceptions, and challenges [34-38], and other teacher-related [39-42], and student-related factors [43-48]. Some of these studies have some negative indicators of teacher function, but more recently, positive psychology has received increased attention and has been devoted to teacher well-being.

Personal well-being does not only refer to the absence of illness at work; it also refers to the teachers' health and success on the job [49,50]. According to Priebe [51], in his study on the perceived wellness influence of employees on work engagement, those who are more healthy have higher levels of

work engagement, and the effect of wellness on work engagement is partially mediated by psychological activities. Lauzon [52] discovered that the activities that supported teachers' wellness included a connection between positive relationships with colleagues, students, and families and higher student performance results. Its conceptualization is centered on affective and cognitive processes, as well as their mental and physical manifestations. It is composed of factors that are personal, dispositional, organizational, and even environmental. Thus, teachers are tasked with the responsibility of delivering health-related programs to students, including physical activity (PA) programs [53]. This way, teachers' wellness will not only boost morale but will also increase productivity and save money, potentially enhancing student program implementation and performance success in the workplace.

Teachers' frontline effort is critical to our social and economic growth and development, and while this is a compelling reason to prioritize teacher wellbeing, it does not outweigh the simple fact that we have a duty of care; teachers' lives, health, and well-being are valuable. Inattention to students' well-being may have a detrimental effect on teaching and educational standards, the quality of their education, and ultimately their achievement at the high school and national levels.

The concept of wellbeing is anchored in this study on Fisher's (2009) framework, as cited in Ekwulugo's [54]. He identified four recurring factors that defined the concept of wellbeing (self, community, environment, and transcendent) and categorizes them into four domains; each component part contributed to the total form of what Fisher referred to as spiritual wellbeing (SWB). Fisher asserts that these domains should serve as the foundation for any research on well-being. These indicators will serve as the foundation for the following measures of teaching professionals' workplace wellbeing: If the item pertains to the environment and resources, it is classified as environmental wellbeing; if the item pertains to the quality of working relationships with other people, it is classified as communal wellbeing; and if the item pertains to the quality of working life and self-related events, it is classified as personal wellbeing.

The term "well-being" refers to an individual's satisfactory state of physical safety, mental health, professional development, and personal welfare across three domains: the environment, the community, and personal conditions in the workplace. It is facilitated by workplace systems and structures that promote the employee's deliberate personal and professional development.

Fisher asserted that environmental, communal, and individual well-being were all components of a broader concept of well-being. Workplace well-being is instead based on the quality of physical resources and information that teachers have access to in order to fulfill their teaching roles; it is also based on the quality of relationships and working communities that teachers have to support their work and guide them through progressive teaching practices and continued development; and it is also based on a broad view of personal fulfillment and work-life quality.

Environmental wellbeing is defined in this study as the physical environment, which includes the school grounds, the building, the facilities and resources contained within it, the structure of the working day and the systems and processes that comprise it, the school ethos, the students, and other members of the teaching, administrative, and support staff, and their potential contributions to the provision of basic resources and the quality of the physical working environment in which teachers work.

Communal well-being refers to the supportive and collaborative relationships that exist within the educational work environment, as well as the systems and structures that facilitate these relationships. Communal well-being is manifested daily through support, communication, and collaboration between staff, departments, and schools and whole-school initiatives for professional learning communities, mentoring, and coaching programs.

Personal well-being refers to a teacher's overall quality of work life and the degree of positivity and contentment attributed to aspects of desire, meaning, and purpose in the classroom that motivate and strengthen teachers. They [55] discovered in their research, commitment is critical to personal well-being and overall effectiveness. Psychologists discovered that committed teachers had an enduring belief that they can make a difference in their students' learning lives and achievements as a result of their own identities as teachers, their knowledge, skills, and personal and professional values [55].

Many teachers, at some point in their careers, are highly likely to experience chronic stress in ways that are detrimental to their health, their teaching, and their students' learning. These negative feelings of well-being can have long-lasting consequences. By examining teachers' state of well-being at work across three domains: environmental, communal, and personal, one can begin to address the reality of teacher well-being as perceived by teachers. With teacher input, research can progress toward resolving issues and sustaining established best practices in order to ensure the health and efficiency of teaching professionals, the longevity of the teaching profession, and the quality of broader educational standards in Region X.

2. MATERIALS AND METHODS

This study used a descriptive correlational design. It used a quantitative method of research to examine the demographic profile of teachers and their workload in academic and ancillary functions in DepEd schools. The study examined students' academic performance. The workload of teachers and the NAT performance of learners were collected during the school year 2017-2018 from DepEd elementary and secondary schools in the Division of Bukidnon using stratified random sampling.

With the approval of the School Division Superintendent of the Department of Education, Division of Bukidnon, a letter of consent was sent to the teachers per identified school informing them that they had been selected as prospective study participants. Prospective participants were given a Participant Information Sheet outlining the study's key details in order to assist them in making an informed decision about their participation. Once they agreed to participate in the study, they signed the Certification of Consent Form that was

included with the questionnaire. Then, using a Google Form, data were gathered from the principals of the schools in the Division of Bukidnon. A letter of request for data utilization was sent to the Division Office of Bukidnon regarding the learners' NAT performance in 2017-2018.

A scaled survey was used to ascertain teachers' well-being in three (three) domains: environmental well-being, communal well-being, and personal well-being. It was patterned from Ekwulugo [54]. It was subjected to a tryout, with a Cronbach Alpha of 0.9267. To ensure the questionnaire's suitability, it was validated by three experts. The study employed quantitative analysis through the use of mean, standard deviation, correlation, and multiple regressions, with RA 4670 and DepEd Memorandum Order 291, s.2008 serving as the basis for rating teacher workload.

Descriptive statistics like mean and percentages were used to determine the performance of students and analyzed the data obtained from the results of the survey questionnaires. Pearson product-moment correlation was employed to determine if a correlation existed between academic performance and teachers' workload and workplace well-being.

3. RESULTS AND DISCUSSIONS

This section presents the interpretation and analysis of the data gathered from the teachers and the NAT results of Grade 6 and Grade 10 learners. The presentation follows the order of the objectives of this study.

NAT performance of Grade 10 and Grade 6 learners in 2017-2018

Figure 1 presents the NAT performance of Grade 10 learners in 2017-2018. As can be gleaned from the figure, Filipino showed the highest overall MPS of 54.06 followed by Araling Panlipunan with 47.89, and English with 42.64. Science and Math recorded the lowest performance registering an overall mean of 37.54 and 31.27, respectively. As against the national standard level, all the subject areas are below the standard level of acceptable MPS of 75%.

On the other hand, Figure 2 presents the NAT performance of Grade 6 learners in 2017-2018. As can be gleaned in the figure, still Filipino showed the highest overall MPS of 51.08 followed by Math and HEKASI with 38.33 and 38.17, respectively, English with 37.83, and Science recorded the lowest performance registering an overall mean of 29.48. As against the national standard level, all the subject areas are still below the standard level of acceptable MPS of 75%.

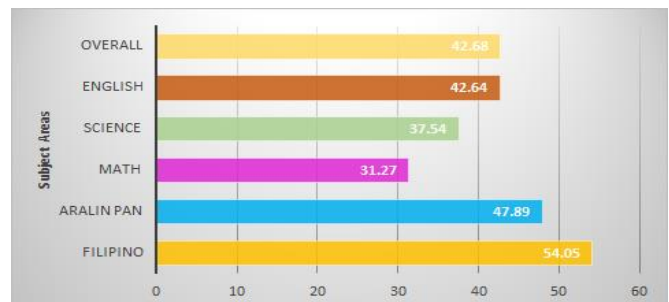


Figure 1. Grade 10 National Achievement Test Results S.Y. 2017-2018

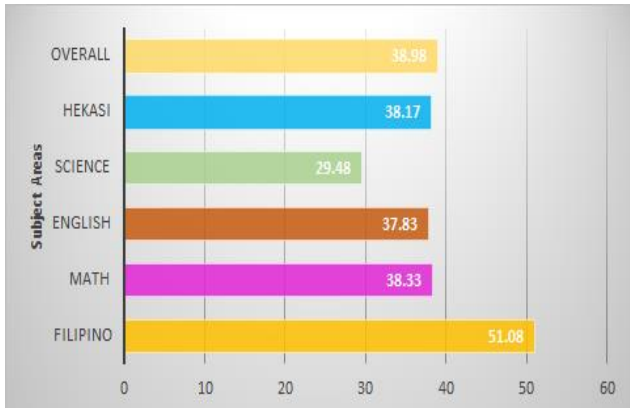


Figure 2. Grade 6 National Achievement Test Results S.Y. 2017-2018

The graphs for both Grade 10 and Grade 6 above, showed that the overall NAT results of the sampled schools in the Division of Bukidnon fall below the set goal of 75% MPS. Looking at the different subject areas, still, none reached the set standard. One of the reasons for low NAT results in science for both grade levels is that students are passive during lectures and discussions because whenever they feel bored with their lessons, their attention quickly shifts elsewhere, thus students fail to understand basic concepts [56].

The below-standard level results of all competencies (overall MPS of 42.68 and 38.98, respectively) might be the effect of school-related and non-school-related factors, thus affecting the psychological behavior of students at school. Among the school-related factors include poorly trained and unqualified teachers, dilapidated instructional materials, and inadequate facilities. Non-school-related factors include illiteracy and low educational attainment of parents, poverty, and poor health and nutrition [57]. The said factors prevent the promotion of students' well-being and determination to study which can develop satisfaction with life and can support creative thinking skills as well as better learning [58], thus affecting their NAT results.

Non-school-related factors include illiteracy and low educational attainment of parents, poverty, and poor health and nutrition [57]. The said factors prevent the promotion of students' well-being and determination to study. These affect satisfaction with life and creative thinking skills as well as learning [58], thus affecting their NAT results. These factors may be the reasons for the low NAT performance of the pupils and students. However, these were not part of the study. Another study in the project took charge of student factors.

Workload of Teachers during the School Year 2017-2018

The teachers' workload for both elementary and high school is presented in Figures 3 and 4.

The elementary teachers' workload in their order of categories indicating "heavy" is 60%, "medium" is 24.7%, and "light" is 15.3% as shown in Figure 3.

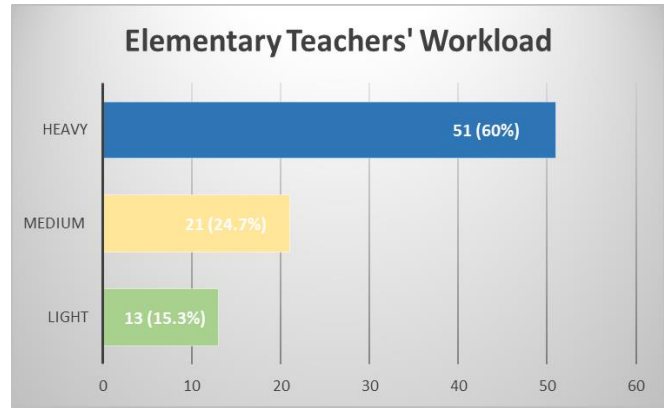


Figure 3. Elementary Teachers' Workload in S.Y. 2017-2018
The high school teachers' workload in their order of categories indicating "heavy" is 70.6%, "medium" is 23.5%, and "light" is 5.9% as reflected in Figure 4.

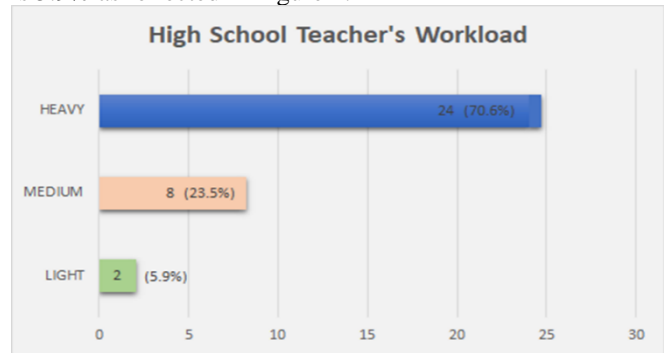


Figure 4. High School Teachers' Workload in S.Y. 2017-2018

The figures above show that the majority of both elementary and high school teacher participants have a heavy combined weekly workload (DM 291, s. 2008). This accord agrees with the Victorian Government School Agreement in 2008 in which job descriptions were pointed out to contribute to the workload of teachers at a great level. This includes face-to-face teaching which consists of assemblies, restored classes, and extras. Other duties also include the preparation of lessons, corrections, assessments, meetings, student supervision as well as organizational duties. As well as additional roles performed by teachers designated as heads of departments and class advisers.

When the duties and responsibilities of a teacher are the same as that of many teachers' job descriptions, what will be projected is quantified [59]. For instance, when the time spent by a teacher is considered to be excluding his/her duties, then the workload and its effect need to be measured and be classified as heavy [60]. Aside from the above-mentioned reasons, another contributing factor to heavy workload is emphasized by Debra as cited by Amalu [61] that work is considered heavy in a certain situation where teachers feel they are being tasked to do more than time or ability permits, thus resulting them to be stressed out and feel pressured.

The Extent of Workplace Wellbeing of Teachers

The extent of workplace well-being of elementary and high school teachers is presented in Tables 1 and 2, respectively. Workplace well-being of teachers is categorized into dimensions namely: communal, personal, environmental, and overall.

Table 1. Workplace Wellbeing of Elementary Teachers’ Workload in S.Y. 2017-2018

Workplace Wellbeing Dimensions	Mean	SD	Qualitative Description
Communal	4.31	0.48	Very High Extent
Personal	4.11	0.63	High Extent
Environment	4.07	0.57	High Extent
Overall	4.16	0.56	High Extent

Table 2. Workplace Wellbeing of High School Teachers’ Workload in S.Y. 2017-2018

Workplace Wellbeing Dimensions	Mean	SD	Qualitative Description
Communal	4.27	0.49	Very High Extent
Personal	3.90	0.56	High Extent
Environment	4.03	0.53	High Extent
Overall	4.07	0.53	High Extent

The teachers’ overall workplace well-being in both elementary and high school is to a high extent (4.16 and 4.07, respectively), with the communal dimension having the highest mean (4.31 and 4.27, respectively), and are described as to a very high extent. The environmental dimension has the lowest mean and is described as to a high extent (4.07) for elementary teachers while personal well-being is the lowest (3.90) for high school teachers. The teacher is of high extent in the sense that they showed a satisfactory state of physical safety, mental health, professional development, and personal welfare within the workplace. While very high extent is a very satisfactory state.

As to the communal dimension, the majority of the participants enjoyed working in a team (4.50) and at the same time with the people within their departments (4.32). With that, they felt that their work is valued by their colleagues and senior management (4.21). They are contented with the idea that they have someone to go to at work when they needed somebody to talk about their problems (4.44). And that includes their close friends at work (4.50), and colleagues that they can trust with confidential information about themselves or others (4.50). They also trusted their employers (4.32) which made them cooperate with their school heads (4.32). They believe that there are formal and informal structures and systems in place that provide compassionate and helpful support when needed (4.29; 4.24). Thus, realizing that general communication between colleagues and departments are good duty because they enjoyed it (4.29). As a result, they voluntarily contribute to extra-curricular duties (4.21) because of the reason that they enjoyed it (4.24). As to the effect it gives on the students, it

created a positive and healthy relationship with each other (4.47) since they find students are pleasurable to teach or since they find teaching pleasurable (4.47). Students are the ones that led teachers to be flexible to change (4.38) and their dealings with senior management provided a positive experience between teachers (4.24) and students (4.29).

As for personal dimensions, the majority of the teachers are consistently committed to their work (4.29), motivated to do their job well (4.26), and the expectations placed on them by their employers are achievable within their current working environment (4.26).

The findings of this study are supported by Dal Corso et al. [62]. They investigated the effects of perceived performance appraisal justice on teachers’ well-being. Teachers perceived higher means on the different well-being factors like performance, job satisfaction, and life satisfaction.

Relationship of the NAT performance of Grade 10 and Grade 6 learners in 2017-2018 and their Teachers’ Workload and Wellbeing

The correlation between the learners’ NAT performance and their teachers’ workload and well-being was determined and presented in Table 3 and Table 4, respectively.

Table 3 illustrates that teachers’ workload has no bearing on the NAT performance of the learners with r values -0.192 with $p=0.276$ and 0.082 with $p=0.457$ for high school and elementary teachers’ workload, respectively. This indicates that even if teachers have light, medium, or heavy workloads, it has nothing to do with their learners’ performance in NAT. This finding contradicts the results of the study of Fan and Smith [14] when they found an indirect effect of workload to performance.

Table 3: Correlation between NAT performance and Teachers’ Workload

Variables	r	p	Remarks
High School Teachers’ Workload	-0.192	0.276	Not Significant
Elementary Teachers’ Workload	0.082	0.457	Not Significant

*significant at 0.05 level

In Fan and Smith [14], workload predicts fatigue which then resulted in to change in performance. However, in this investigation, only workload is associated with pupils’ and students’ performance. Teachers might be having light to heavy workloads but never feel the burden of the tasks, which implicates no association at all.

Moreover, the lack of a significant relationship between teacher workload and learner performance opposes the result of the study of Gwambombo [60] when he found that in their place, teachers’ workload is heavy and has a negative effect on students’ academic performance. The inconsistencies may be attributed to the number of teachers with heavy workloads compared to those with only light to medium tasks as well as the feeling of the teachers while doing the additional work assigned to them.

As shown in Table 4, the elementary and high school learners’ NAT performance has no significant correlation with the well-being of their teachers. However, for sub-variables on

environmental wellbeing, it can be gleaned from the same table that elementary teachers' wellbeing has a significant positive relationship with the NAT performance of their Grade 6 pupils with $r=0.234$ and $p\text{-value}=0.031$.

Table 4: Correlation between NAT performance and Teachers Wellbeing

Variables		r	p	Remarks
High School Teachers' Wellbeing	Environmental	-0.167	0.345	Not Significant
	Communal	-0.216	0.221	Not Significant
	Personal	-0.276	0.114	Not Significant
	Over-all Wellbeing	-0.243	0.166	Not Significant
Elementary Teachers' Wellbeing	Environmental	0.234	0.031*	Significant
	Communal	-0.194	0.076	Not Significant
	Personal	0.195	0.073	Not Significant
	Over-all Wellbeing	0.179	0.101	Not Significant

*significant at 0.05 level

In this study, environmental well-being is defined as the physical setting which includes the school grounds, the building, the facilities and resources within it, the structure of the working day and the systems and processes within the working day, the school ethos, the students and other members of teaching, administrative and support staff and how they may contribute to the provision of basic resources and quality of the physical working environment that teachers work within. If this scenario is present in the school, then a possible high performance in NAT of learners will be expected. This is the implication of the positive correlation between elementary teachers' well-being and the NAT performance of their pupils. If the above school setting is in place, teachers will be able to focus on their major function – instruction. However, the absence of this scenario may eat up time for the teachers to focus on beautifying the school environment rather than teaching their pupils in school.

With proper environmental support, teachers' well-being is kept at a positive level, thus, the academic performance of pupils will be favorable since it is a crucial part of effective learning [11].

The findings of this study are supported by the work of Briner and Dewberry [10] who found that there is a significant association between the well-being of teachers and the measures of school performance specifically for pupils with special needs. Although participants of this recently concluded study were in the mainstream, the result implies that teachers' well-being must be given attention because it is associated with pupils' performance not so with the high school students' achievement.

With environmental well-being associated with the performance of pupils, the administration of schools may consider providing all the physical needs of the teachers rather than giving the responsibility to beautifying the learning environment to them. This must be given utmost priority since

there is a two-way relationship between teachers' well-being and pupil performance (Briner & Dewberry, 2007). Enhanced teacher well-being can lead to increases in student performance, so improving student performance may lead to increased teacher well-being. However, a drop in teacher well-being at the school could lead to lower student achievement, which could lead to another drop in teacher well-being, and so on.

4. CONCLUSION AND RECOMMENDATIONS:

Based on the findings of the study, the following conclusions were drawn:

The Grade 10 and Grade 6 learners did not pass the mean percentage scores in the 5 subject areas of the NAT. The majority of the teachers had exceeded the prescribed optimum weekly workload (prescribed in DM 291, s. 2008). Overall, the teachers showed a satisfactory state of physical safety, mental health, professional development, and personal welfare within the workplace. Further, the teacher showed a very satisfactory state in the communal dimension, while satisfactory in the personal and environmental dimensions. The workload of teachers has no direct bearing on the NAT performance of learners. The environmental component of the workplace well-being of teachers has a direct bearing on the NAT performance of Grade 6 and Grade 10 learners. However, the personal and communal components of workplace well-being have no direct bearing on the NAT performance of learners. The following recommendations are made based on the aforementioned conclusions: The teachers are encouraged to give high priority in developing the learners' competencies in the 5 subjects areas of NAT starting from Grade 7 upwards. They can be capacitated to conduct mock NAT exams to closely monitor the overall progress of the learners and to help them be familiar with exams of a national nature. The guidelines for the implementation of CSC resolution on working hours of public school teachers should be strictly observed. The hiring of additional school staff may be considered. The supportive and collaborative environment and the synergy of the daily support system, communication, and collaboration between teachers, the DepEd, and school heads, including whole-school initiatives for professional learning communities should be sustained. The environmental well-being factors which include the provision of basic resources and the quality of the physical working environment that teachers work within, may be improved and given more attention. The personal well-being of high school teachers may also be given much attention. Seeing that teacher workload and NAT performance of students has no direct correlation, other factors that directly and adversely affect NAT performance may be looked into. DepEd may reconsider looking into other predictors of students' achievement rather than that of the teachers' factor. A similar study may be conducted using a qualitative research design may be ventured to validate the qualitative result of this study.

5. ACKNOWLEDGMENT:

The researchers greatly acknowledged Central Mindanao University headed by Dr. Jesus Antonio G. Derije for the research grant that enabled them to do this work. Also, they would like to extend their gratitude to the Vice President for

Research, Development, and Extension, Dr. Alan P. Dargent, the Director of Research, Dr. Jupiter V. Casas, the research coordinator, Dr. Raul C. Orongan, the Dean of the College of Education, Dr. Gladys S. Escarlos, and the teachers from the Department of Education in the Division of Bukidnon for the support extended to finally come up with this investigation.

6. REFERENCES:

- [1] Hettelman, K. R. (October 28, 2007). Don't deny state's kids a quality education, The Baltimore Sun. Maryland.
- [2] Hanushek, E.A., Kain, J.F., O'Brien, D.M., & Rivkin, S.G. (2005). The market for Teacher Quality. NBER Working Paper Series. Cambridge, MA 02138.
- [3] McCaffrey, D.F., Lockwood, J., Koretz, D., Louis, T.A., & Hamilton, L. (2003). Models for value-added modeling of teacher effects. Journal of Educational and Behavioral Statistics, forthcoming.
- [4] Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? Journal of Teacher Education, 53(4), 286-302.
- [5] Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher professional development in the United States and abroad. Texas: National Staff Development Council.
- [6] Goldhaber, D.D., & Brewer, D.J. (2000). Does teacher certification matter? High school teacher certification status and student achievement. Educational Evaluation and Policy Analysis, 22 (2): 129-146.
- [7] Hickman, G. P., Bartholomew, M., Mathwig, J., & Heinrich, R. S. (2008). Differential developmental pathways of high school dropouts and graduates. Journal of Educational Research, 102(1), 3-14.
- [8] Hanushek, E.A., Kain, J.F., Rivkin, S.G. (2004). "Why public schools lose teachers". Journal of Human Resources 39 (2), 326-354.
- [9] Wong, H.K., & Wong, R.T. (2001). How to Be an Effective Teacher: The First Days of School. Mountain View, Calif.: Harry K. Wong Publications 338 pages.
- [10] Briner, R. and Drewberry, C. (2007) Staff wellbeing is key to school success: A research study into the links between staff wellbeing and school performance. London: Birkbeck College, University of London and Worklife Support Ltd.
- [11] Turner, S. Braine, M. (2016) 'Embedding Wellbeing Knowledge and Practice into Teacher Education: building emotional resilience', TEAN Journal, 8(1), pp.67-82.
- [12] Amey, G., & D'Angelo, C. (2004). *How do you define and measure research productivity*. Scientometrics, Vol. 2 (2), pp.1129-1144.
- [13] Bruggen, A. (2015). An empirical investigation of the relationship between workload and performance. Management Decision, Volume 53 Issue 10.
- [14] Fan, J. & Smith, A. (2017). *The impact of workload and fatigue on performance*. Springer Champ Publishing. Cardiff University
- [15] Haddon, J. (2018). The impact of employees' wellbeing on performance in the workplace. Strategic HR Review, Volume 17 Issue 2.
- [16] Benevene, P., De Stasio, S., & Fiorilli, C. (2020). Editorial: Wellbeing of School Teachers in Their Work Environment. Retrieved on November 19, 2020 from <https://www.frontiersin.org/research-topics/9381/well-being-of-school-teachers-in-their-work-environment>.
- [17] Brasfield, M. W., Lancaster, C., & Xu, Y. J. (2019). Wellness as a Mitigating Factor for Teacher Burnout. *Journal of Education*. Retrieved on November 19, 2020 from <https://doi.org/10.1177/0022057419864525>
- [18] Facunla, J. D., Tan, D. A. (2020). Students' Academic Performance and Self-Efficacy Beliefs in a Contextualized Instruction, *Science International (Lahore)*, 32 (6), 685-690.
- [19] Aguanta, E. & Tan, D.A. (2018). Effects of Dyad Cooperative Learning Strategy on Mathematics Performance and Attitude of Students Towards Mathematics, *International Journal of English and Education*, 7(3), 303-313.
- [20] Coronel, C. & Tan, D.A. (2019). Twenty-First (21st) Century Skills and Student Mathematics Performance in Self-Blend Approach, *International Journal of English and Education*, 8(2), 342-357, April 2019.
- [21] Segumpan, L., & Tan, D. (2018). Mathematics performance and anxiety of junior high school students in a flipped classroom, *European Journal of Education Studies*, Volume 4, Issue 12.
- [22] Saligumba, I.P., & Tan, D. (2018). Gradual Release of Responsibility Instructional Model: Its Effects on Students' Mathematics Performance and Self-Efficacy. *International Journal of Scientific & Technology Research*. Volume 7, Issue 8. 276-291.
- [23] Murillo, J. A. & Tan, D. A. (2019). Students' Mathematics Performance and Engagement in an Inquiry-Based Learning Approach, *International Journal of English and Education*, 8(3), 64-74.
- [24] Caballes, D. G., & Capinig, R. A. V. (2020). DepEd commons: sustaining students' learning in physical science. *CiiT International Journal of Data Mining and Knowledge Engineering*, 12(3), 55-60.
- [25] Cordova C., Tan D. and Uchang J. (2018). Take Home Assignment and Performance of Grade 11 Students. *International Journal of Scientific and Technology Researches*, 7(12), 57-61.
- [26] Cordova, C., Pagtulon-an, EA., & Tan, DA. (2018). No Assignment Policy: A Boon or A Bane?!. *International Journal of English and Education*, 8(1), 144-160.
- [27] Pagtulon-an, E. & Tan D. (2018). Students' Mathematics Performance and Self-efficacy Beliefs in a Rich Assessment Tasks Environment. *Asian Academic Research Journal of Multidisciplinary*. 5(2), 54-64.
- [28] Tan, D.A., Cordova, C.C., Saligumba, I.P.B., Segumpan, L.L.B. (2019). Development of Valid and Reliable Teacher-made Tests for Grade 10 Mathematics. *International Journal of English and Education*, 8(1), January 2019, 62-83.
- [29] Prado, N.I., Tan, D.A. & Capuyan, J.B. (2019). Effects of Instructional Materials in General Mathematics and High School Statistics on the Attitude, Self-Efficacy Beliefs,

- and Performance of High School Students, *Liceo Journal of Higher Education Research*, 15(1), 112-129.
- [30] Ansayam, M.P.G., Tan, D.A. (2021). Investigating the Utilization of Digital Instructional Materials and Digital Tools for Online Learning in Teacher Education Courses, *International Journal of Scientific & Technology Research*, 10(7), 125-137.
- [31] Tiria, R. A., & Caballes, D. G (2020). The digital skills of secondary school teachers in Manila. *CiiT International Journal of Software Engineering and Technology*, 12(3), 33-37.
- [32] Vasquez, A. G., Caballes, D. G., Panol, R. F., & Valdez, M. R. (2021). Competency level of science teachers in teaching evolution: basis for training design. *Global Journal of Advanced Research*, 8(8), 235-243.
- [33] Caballes, D. G., & Dapitan, D. A. (2019). Determining the level of ICT skills of junior high school faculty of Tagumpay National High School. *CiiT International Journal of Wireless Communication*, 11(5), 80-85.
- [34] Dapitan, D. A. & Caballes, D. G. (2020). Teachers' views on force and motion: towards the development of two-tier test. *CiiT International Journal of Automation and Autonomous System*, 12(2), 44-48.
- [35] Caballes, D. G., Quintos, C. A., Gapad, E. M., & Valdez, M. R. (2020). Perceptions of teachers on the different strains of online modalities of learning: an adoption to new normal. *CiiT International Journal of Software Engineering and Technology*, 12(4), 69-74.
- [36] Caballes, D. G., Peregrino, L. P., & Javillonar, M. G. (2020). Public secondary school teachers' awareness of open educational resources (OER). *CiiT International Journal of Programmable Device Circuits and Systems*, 12(4), 76-80.
- [37] Narca, M. L., & Caballes, D. G. (2020). Philosophical bases of pedagogy in teaching knowledge, skills, attitudes of Sebastianian graduates. *CiiT International Journal of Digital Image and Processing*, 12(3), 49-52.
- [38] Gatilogo, L.M. & Tan, D.A. (2019). Teachers' Motivation, Home Visitation and Performance of Academically At-Risk Students. *International Journal of English and Education*, 8(2), 400-417, April 2019.
- [39] Tan, D.A., Orongan, R.C. & Guayan, D.A. (2015). Coherence of Pre-Service Teachers' Conceptions of Mathematics and Its Teaching, *CMU Journal of Science*. 19 (2015), 16-25.
- [40] Gatilogo, L.M. & Tan, D.A. (2019). Teachers' Motivation, Home Visitation and Performance of Academically At-Risk Students. *International Journal of English and Education*, 8(2), 400-417.
- [41] Gayon, R.M., Tan, D. A. (2021). Experiences of Higher Education Institution (HEI) Teachers in the Implementation of Flexible Learning, *Science International (Lahore)*, 31(1), 47-52
- [42] Langoban, M. A. & Tan, D. A. (2019). Motivation Attributes of Teachers on Their Performance, *International Journal of English and Education*, 8(2), 380-399.
- [43] Tan, R.D.A., Pañares, E.J.A., Pañares, F.J. A. Pagonzaga, E. D., Jumawid, J.A.M., Hinampas, R.T., Tan, D.A. (2021). Investigating the Effect of Social Media on Students' Academic Performance and Well-being During the Pandemic. *International Journal of Scientific & Technology Research*, 10(7), 145-151.
- [44] Duque, C. & Tan, D. (2018). Students' Mathematics Attitudes and Metacognitive Processes in Mathematical Problem Solving. *European Journal of Education Studies*, 4(11), 1-25.
- [45] Tan-Ucang, J. & Tan, D.A. (2013). Students' Beliefs and Mathematics Performance in a Process-Oriented Guided-Inquiry Learning (POGIL) Environment. *CMU Journal of Science*. 17 (2013), 141-157.
- [46] Galarosa, K.J.D., & Tan, D.A. (2021). Students' academic performance and motivation in Physics using Microlearning via Cybergogy. Unpublished Thesis. Central Mindanao University.
- [47] Asparin, A. A. & Tan, D. A. (2018). Students' Problem Solving Skills in Enhanced Gradual Release of Responsibility Instruction Model. *Asian Academic Research Journal of Multidisciplinary*, 5(3), 121-128.
- [48] Tan, D. A., & Balasico, C. L. (2018). Students' Academic Performance, Aptitude and Occupational Interest in the National Career Assessment Examination. *PUPIL: International Journal of Teaching, Education and Learning*, 2(3), 01-21.
- [49] Kruger, E., & Jacobs, L. (2019). Teachers' Workplace and Personal Wellness: *Rethinking Teacher Education for the 21st Century*. Retrieved on Nove,ber 19, 2020 from <https://doi.org/10.2307/j.ctvvp3xhh.16>
- [50] Smith, S., & Lawrence, S. (2019). Early Care and Education Teacher Well-Being: Associations with Children's Experience, Outcomes, and Workplace Conditions. *Child Care & Early Educational Reseach Connections*.
- [51] Priebe, D. R. (2018). *Does Perceived Wellness Influence Employee Work Engagement? Examining the Effects of Wellness in the Presence of Established Individual and Workplace Predictor Variables*. ProQuest Dissertations and Theses.
- [52] Lauzon, L. L. (2003). *Teacher wellness: An interpretive inquiry*. Dissertation Abstracts International Section A: Humanities and Social Sciences.
- [53] Schultz, N. (2018). School employee wellness: Understanding health behaviors and identifying opportunities for student and staff health promotion. *Dissertation Abstracts International: Section B: The Sciences and Engineering*.
- [54] Ekwulugo, V. (2015). An investigation into a group of inner and outer London Secondary Teachers' Perception of their Own Well-being at Work. Thesis. School of Sports and Education. Brunel University.
- [55] McInerney, D.M., Ganotice, F.A., & King, R.B. (2014). Teachers' commitment and psychological wellbeing: implications of self-beliefs for teaching in Hongkong. *Educational Psychology*.35(8). 1-20.
- [56] Hinampas, R.T., Murillo, C.R., Tan, D.A., & Layosa, R.U. (2018). Blended Learning Approach: Effect on Students' Academic Achievement and Practical Skills in

- Science Laboratories. *International Journal of Scientific & Technology Research*. Vol. 7(11), 63-39.
- [57] Victorino, A.N. (2011). Factors affecting the national achievement test of selected second year high school students in Santa Maria, Bulacan. Open University of the Polytechnic University of the Philippines, Manila, Philippines.
- [58] Seligman, M.E.P., Ernst, R., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, 35, 293-31.
- [59] Farrant, J.S. (2005). *Principles and Practice of Education*, Malaysia; Longman.
- [60] Gwambombo, I. (2013). The effect of teachers' workload on students' academic performance in community secondary schools in Mbeya City. Retrieved from http://repository.out.ac.tz/913/1/IDDE%2C_GMhuruma_-_EXERNAL_-_OUT.doc_gabriel.pdf
- [61] Amalu, M. (2013). Impact of workload induced stress on the professional effectiveness of secondary school teachers in cross river state. *Global Journal of Educational Research*. Vol.13. 16-22. <http://dx.doi.org/10.4314/gjer.v13i1.3>.
- [62] Dal Corso, L., De Carlo, A., Carluccio, D.G., Falco, A. (2019). An opportunity to grow or a label? Performance appraisal justice and performance appraisal satisfaction to increase teachers' wellbeing. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2019.02361>